

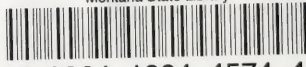
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*Seventh Report*  
*OF THE*  
*...Bureau of...*  
*Agriculture*  
*Labor and Industry*  
*OF THE*  
*STATE OF MONTANA*  
*FOR THE*  
*Year Ending November 30, 1900*



*J. H. CALDERHEAD, Commissioner*  
*OLIVER M. HOLMES, Chief Clerk*



*Helena, Montana*  
*Independent Publishing Company*  
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*1900*







State of Montana,  
Bureau of Agriculture, Labor and Industry.  
Helena, Montana, December 1st, 1900.

To His Excellency, ROBERT B. SMITH,  
Governor of Montana:

Sir:—In accordance with statutory requirement, I have the honor to herewith present you the Seventh and the First Biennial Report of the Bureau of Agriculture, Labor and Industry of the State of Montana.

I am, very respectfully,  
J. H. CALDERHEAD, Commissioner.

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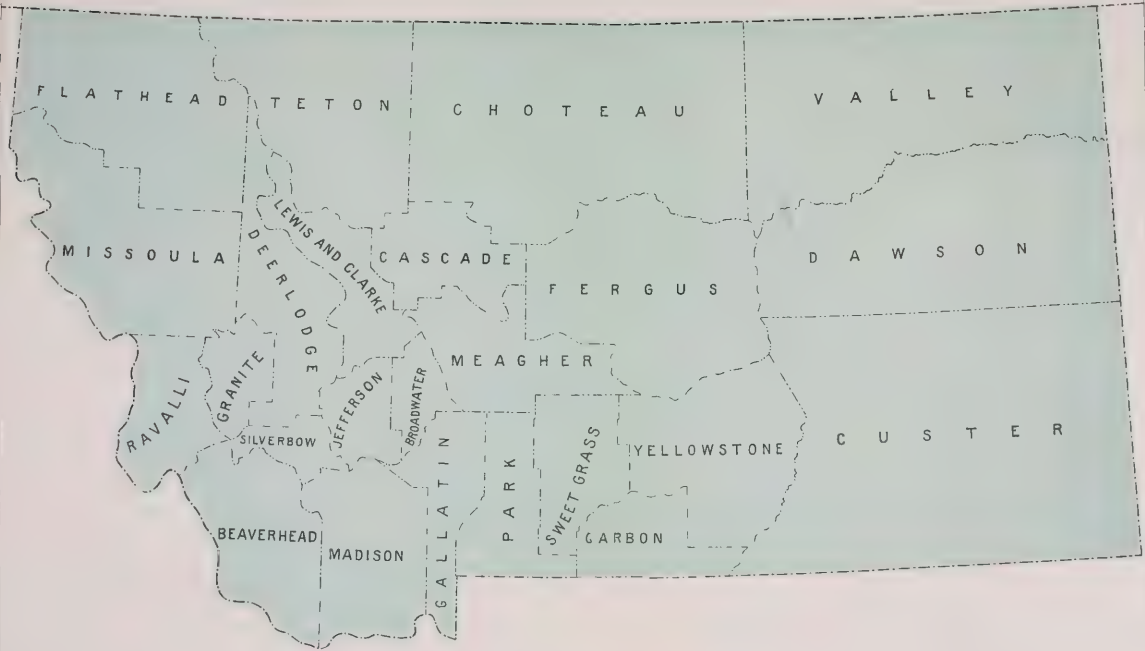
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## Introductory.

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In issuing the Sixth annual report of the Bureau of Agriculture, Labor and Industry, some attention was paid to the developed and undeveloped resources of the state, in descriptions that pointed out the opportunities that were afforded to the capitalist for the investment of his dollars where they would certainly be returned many fold, to the agriculturist seeking a free land location where through his personal endeavor he might establish a home and amply provide for those dependent upon him, and for the laborer, whether skilled or unskilled, who desired to better his condition, and anticipating a larger demand than had previously absorbed but several hundred copies, an edition of 18,000 copies was secured, and the entire number was exhausted in the course of a few months by the demand that followed a liberal announcement of its publication.

As a consequence of the more extended circulation of the report, the bureau was called upon to take care of a correspondence that reached into the thousands, most of the letters being from prospective immigrants of the several classes who had their attention attracted to the state by the report, and who desired to inquire personally as to particular conditions or opportunities. Aside from being in demand by agriculturists, laborers, merchants and those looking for industrial investment, the report received a large demand from eastern bankers, investors and brokers who recognize the state as one of the chief wealth producers of the future and who desired to become more familiar with its possibilities. As a result of the publication the state has acquired a large number of new settlers in the agricultural and stock regions, and the investment of considerable new capital in the development of the state's resources.

The appreciation of and the demand for that report has induced me to again set forth the resources, the natural advantages and the opportunities that Montana offers those who will accept them, and I will endeavor this time to have a sufficient number of copies on hand to provide all those who may desire to learn of the illimitable resources and advantages that lie waiting in Montana. There is no state in the union, there is no section in the world, that offers equal opportunities to either capital or labor or to the agriculturist, horticulturist or stock raiser that Montana does, and while there is money seeking certain industrial investment, while there are those seeking opportunity for work, those looking for agricultural homes, it is incumbent upon a state so liberally endowed with the gifts of a lavish Nature, to inform them.

Montana has made wonderful strides in development since it began its

advancement, but as yet the state has an abundance of almost every natural advantage to offer for the taking, the only exaction being made, that in possessing the advantages that nature has given, their development into remunerative industries follow.

That which must be of most interest to the stranger is a general knowledge of the state, and this is shortly given in the first article of the volume, and following it, to make the reader more familiar with the state as a mineral producer, though but the smallest fraction of its mineral area has been even prospected, there is an article on the mines and mining of the state, showing their production to be nearly 70 million dollars this year, and then the several counties have been given attention, and in the reading of these the inquirer will secure a better idea of the particular resources of the different portions of the state and of the development that has been accomplished.

Following these is an article on what has been accomplished in the way of irrigation, and another upon national irrigation, the last being included in the hope that it will aid in advancing a proposition that in its accomplishment will contribute more to the prosperity of the whole country, to providing homes for those who are being crowded out of the congested cities by reason of their inability to secure lucrative and permanent employment, to increasing the consumption of the finished products of the eastern manufacturer, to the sales of the wares of the merchant, to the securities offered for investment, than all of the national investments that have ever been made; and in making this investment that is so certain of ample and comprehensive return, it is proposed that the nation shall be fully reimbursed. The industries of the states are shown in tabular form, and a comparison with the statements of previous years shows that there is gratifying increase in every line.

Organized labor is one of the recognized institutions of the state and one of the factors of its unparalleled and universal prosperity. The directory of unions will show that every branch of industry is represented at every industrial center, and the schedules of wages will demonstrate that good wages and industrial prosperity may and should exist at the same time and in the same place.

The raising of cattle and sheep and the growing of wool, two of the most important industries of the state, Montana being the largest wool producer among the sheep growing states of the union, are considered at some length.

This report will be found to embrace a comprehensive line of local statistics, affording a recognized source from which desired data may be secured, The analysis of foods, showing adulterations in many of the articles of everyday consumption, will be of interest to every reader and a surprise to many, as it demonstrates to what extent the manufacturer of food stuffs is willing to injure the public health in order to add slightly to the profits of his institution.

One feature that will be of lasting interest and valuable for future reference, is the official precinct vote on the complete national, state and county tickets for 1900.

The natural advantages of Montana have existed since the days of the creation, and it is my belief that if Montana is to become a great state—and

there is every warrant for her becoming the greatest wealth-producer of the sisterhood of states and support the largest and the most prosperous and busiest population—the people of other states and of other countries who are seeking new locations, must be told of what this State has to offer, and the desire to learn of this State was amply demonstrated by the demand for the last report.



A MONTANA RANCH.





ON THE TENDERFOOT.



ON THE MISSOURI.

## “The Treasure State” ❧

**Its Treasures a Wonder,  
Its Scenery Sublime,  
Its Climate Perfection,  
Its History a Romance,  
Its Wealth a Surprise.**



Thou who wouldst see the lovely and the wild  
Mingled in harmony on Nature's face,  
Ascend our Rocky mountains. Let the foot  
Fail not with weariness, for on their tops  
The beauty and the majesty on earth,  
Spread wide beneath, shall make thee to forget  
The steep and toilsome way.

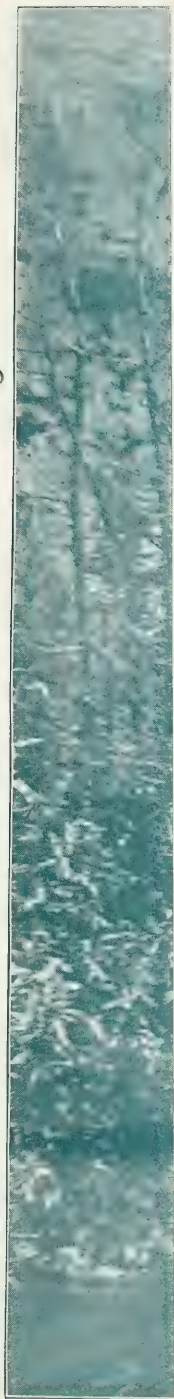
—Bryant.

And when Sieur de la Verendrye in 1742, and in 1805, when the explorers Lewis and Clark climbed to the lofty peaks of the Rockies, after this territory had been acquired from Napoleon, they had spread before their vision “the lovely and the wild;” surrounded by the towering monuments of Nature, they looked down into deep and picturesque valleys that widened as they lost themselves in the billows of the rolling foothills, and cut with the silver glint of many a stream and softened by the sheen of every water fall, the dreams of the poet were awakened.

And when it came to the naming of the territory, its grand mountains christened the child and have since stood as silent sponsor, as well as bountiful patron, during the years that have followed and which have been marked with such unparalleled progress and prosperity—and the territory that was destined to be the brightest star of the constellation of states, was named “Montana,” and foreseeing the wealth that would flow from its hidden treasure, it was given the motto “Oro y plata”—gold and silver.

The credit and the manner of naming Montana has been variously claimed, but it is now accepted that this belongs to Gen. J. W. Denver, and came about in this way: When Stephen A. Douglas was preparing a bill for the admission of this part of the United States as a territory, he was at a loss for an appropriate name and called Gen. J. W. Denver to his assistance. As the general was a veteran of the Mexican war and familiar with many Spanish words, he at once replied to Senator Douglas' query—“Why not name it Montana? It is a Spanish word and means a mountainous country.” Douglas' wife was one of the noted linguists of the capital, and doubting Gen. Denver's knowledge of the Spanish language, the word was referred to her and the translation was approved and the name endorsed. Thus satisfied, Senator Douglas said—“Governor, it is just the word and I will adopt it.” The measure was prepared and “Montana” was incorporated in it as the name of the proposed new territory, but the bill failed to pass at that time; though it re-







ON THE MISSOURI.

tained its name, and when the organization occurred in 1864, three years after the death of Senator Douglas, it was formally christened as he and Gen. Denver would have had it.

The act providing for the admission of Montana as a state, was passed by congress on February 22d, 1889, and was the result of the conscientious and efficient labor of Governor-elect J. K. Toole, who represented the state as its delegate in congress, and who had promised the people while making his campaign that if he was elected he would return from congress with the proclamation establishing Montana as a state and adding another star to the constellation of the American flag—and he fulfilled the promise. The act provid-



OF DAYS THAT HAVE PASSED.

ing for the admission of the state was signed by President Cleveland, and after it had been ratified by the people of the state at an election held on the first Tuesday of October of the same year, the formal proclamation was issued and signed by President Harrison on Nov. 8th, 1889.

Montana has a population of 243,329 and an area of 146,080 square miles, or 93,491,200 acres and 770 square miles of water surface, is included between latitude 45 and 49 north and longitude 104 and 116 west, and is bounded on the north by the Canadian provinces of Alberta and Assiniboia, on the east by the Dakotas, on the south by Wyoming and Idaho, and on the west by the latter state. The great area of the state can be better appreciated by giving its width north and south as 275 miles and its average length east and west 535 miles, and calling attention to the fact that it is the third largest of the states of the Union. While Montana is popularly known, and with the mil-



lions not well informed of our local topography, supposed to be entirely mountainous, less than one-third of its area is occupied by the Rocky Mountains and the lesser ranges and spurs, and the other two-thirds is about equally divided between range and agricultural lands, all being susceptible to the highest and most profitable cultivation when artificially watered. There are, however, large districts of the agricultural lands that are now and can be placed under profitable cultivation without irrigation, and many of the valleys, notably the Flathead valley and others of smaller area, have an abundant precipitation of moisture to insure a certain and luxuriant growth of the varied crops of the western farm. The arable lands of the state are greater than that of New York, Pennsylvania, Massachusetts, Connecticut, Rhode Island, New Hampshire, New Jersey, Maryland and Delaware, all combined, and from this fact the future possibilities of Montana as an agricultural state may be easily and safely prophesied. The extent of Montana can only be appreciated by comparisons. It is larger than Minnesota and Iowa combined; it is larger than New York and the six New England states, and is larger than England, Ireland, Scotland and Wales all put together—and all of its vast area can be made to produce a world of wealth. Its every mountain peak stands as a sentinel over rich mineral wealth; its rolling foothills pasture great herds of cattle and flocks of sheep, and its broad acres of fertile prairie can be made to provide homes for tens of thousands of agriculturists.

And with the supposition that the state is only mountainous, goes the impression that its altitude must be proportionately high, but it is a fact that over forty per cent of its area has an altitude of less than 5,000 feet above sea level, the greater part of the northeastern portion of the state below 3,000 feet and many of its valleys below 2,200 feet. But seven per cent of the area of the state has an altitude of 8,000 feet, nine per cent 7,000 feet, 14 per cent 6,000 and 21 per cent 5,000 feet. The average altitude of the state is below 3,900 feet, while that of Colorado is 7,000; Nevada, 5,600; Wyoming, 6,500. The same authority, that of Prof. Gannett of Hayden's survey, states that Montana has 51,600 square miles that lie below 4,000 feet, while Colorado has but 9,000 square miles with as low an altitude. And added to this great tract of moderately low altitude, Montana has 40,700 square miles that lie below 3,000 feet above sea level.

Aside from the mountain valleys of both sides of the main range, the lands of the lower altitude are embraced principally in Cascade, Teton, Fergus, Choteau, Yellowstone, Custer, Dawson and Valley counties, and the topography of these may be generally described as an undulating prairie, except in the parts of counties that lie near the mountains, where the foothills make a rougher and more broken surface and the frequent coulees afford egress for the many mountain streams that wend their way over the prairies and finally lose their waters in the Great Missouri. A portion of Teton county is mountainous and the southern part of Cascade county lies in the Belt range, but as these are rich in deposits of gold, silver, copper and other metals, the districts so occupied are reckoned by the counties as most valuable assets. The other counties of the state are mountainous, though there are in all of them broad valleys and basins that afford thousands of square miles of the most fertile soil and provide opportunities for the agriculturist and stockraiser that

can not be excelled by the most favored spots of any state. The prairie counties of the state have but little timber, but the mountainous counties have the greatest abundance, every hill and mountain-side being covered with

a heavy growth of a variety of commercial timber, pine, spruce and fir, predominating.

The main range of the Rocky mountains runs through the center of the western portion of the state, and from their snow-capped peaks and riven sides flow the thousands of streams that make it the best watered state of the mountain region, and which in the near future will provide the reservoir supply that will be made to water the state's thousands of square miles of fertile bench and prairie, and



ON A VACATION.

then pass on to do the same service for the semi-arid portions of the Dakotas. The general elevation of the range, at its crest, is not over 6,500 feet, but its lofty peaks reach heavenward from 8,000 to 12,500 feet, and at these higher elevations the snows of all ages have accumulated, and



EVERYDAY SCENERY.

those who make the tiresome climb, may look down through the clouds and the storms to the sunshine of the picturesque valleys below. The higher and more precipitous part of the Rockies is that embraced in Teton



county, in what is known as the Ceded Strip of the Blackfeet Indian reservation. This strip was purchased from the Indians a couple of years ago and opened to mineral location. The district had been examined previously by government mineralogical experts and they reported probable vast copper deposits, and on the strength of their report the district was purchased. Since the opening of this strip to location, claims have been located on two great parallel fissures that run from Divide mountain in a northwesterly course to Mt. Grinnell, both of which have very rich croppings, and are now under process of development. Beside the main range of the Rockies, there are many spurs and smaller ranges, the latter perhaps being better classed as isolated groups, as they are short and not of great height, and rise independently in the center of large level areas.

The largest and most important rivers of the state are the Missouri and the Yellowstone. The former finds its source in the united waters of the mountain streams of Madison, the most southerly county in the state, and thence wends an erratic course north to the center of Choteau county, within thirty miles of the Canadian border, when it turns and runs almost directly east to the eastern boundary of the state. The Yellowstone river has its source in a celebrated lake of that name located in the Yellowstone National park, and meanders through the state in a northeasterly direction, finally emptying its waters into the Missouri at Fort Buford, just across the eastern state line in North Dakota, and but fifty miles south of the Canadian line. Both of these rivers are navigable for hundreds of miles, and before the advent of transcontinental railways that afforded the more rapid transit, they took a prominent part in the development and commerce of the state. The record of the Missouri river steamboat will never fade from the earlier pages of the history of Montana. The Columbia river and its thousands of tributaries traverse the western part of the state, and a loop of the Kootenai, hundreds of miles in length, runs through the western part of the state. Added to these are many rivers of more or less importance and thousands of smaller mountain streams, each valley or gulch having its babbling brook that flows "on, and on, forever, ever." While Montana is not a state of lakes, still it has many a beautiful inland gem, the most prominent of which is Flathead lake in the northwestern quarter of the state. This lake is 27 miles in length and has an average width of 12 miles. It is surrounded first by a wide circle of the richest of agricultural lands, and this belt is one of the chief fruit districts of the state. Peaches, pears, apples and all the smaller fruits are raised here in the greatest abundance and finest quality, the valley claiming to have raised the largest apple on record. Mountains rise on every hand back of this horticultural belt, and these are rich in mineral wealth, and burdened with a heavy growth of timber. Both the lake and its chief tributary, the Flathead river, are navigable, and are important factors in the transportation of that section of the country.

Montana is grand and artistic in its scenery; it is incomparably rich in its mineral deposits; the soil of every hill and of every valley is abundantly prolific.

And added to all these lavish gifts of Nature, it has the most exhilarating and healthful climate and the greatest abundance of the purest water, and



numbers of thermal springs impregnated with many healing properties, murmuring an offering of healing to those who come from without the state bringing their infirmities with them. There are no fogs, no malaria in Montana, and contagious and infectious diseases are rare, and when manifested, prove to have come from the infection of less favored states, but here they yield readily to professional treatment, proving fatal in only the exceptional case. The winter season is not one of continued cold; when the frigid breezes of Canada are directed over the state, the thermometer will drop as low as



GOLD PLACER—GIANT NOZZLE AT WORK.

twenty degrees below zero, but these cold periods are infrequent and of short duration, as the prevailing winds of the winter are the soft chinook that quickly dissipates the snow and brings the balmy atmosphere of summer and the tinge of a pleasing autumn. And when a cold wave does sweep in from the east or north, it is not severely felt as the atmosphere at such times is almost entirely free from the chill of moisture, and one does not feel twenty below here as severely as zero and above is felt in the eastern states. Except upon the plains of the extreme eastern border of the state, the blizzard is unknown, and the cyclone and the tornado are not known. Great herds of cattle and flocks of sheep feed throughout the winter on every bench and plain, and these are given but little shelter, food or attention. The nourishing properties that remain in the grass and sustain the stock during the winter months is due to the fact that before the grass is ripened, the chinook winds cure it, turning it into standing hay, instead of having the frost drive the nutriment into the roots, leaving dead and substanceless straw. This, with the salubrity of the climate, is the secret of the success of Montana's stock ranges. The snow fall is light except in the midst of the mountain ranges and at the higher

altitudes, the greater part of the state seldom receiving a precipitation of snow of more than two or three inches at a time. The winters are capricious, but they are sunlit, warm and inviting, and the occasional cold snap but adds vigor to the universal energy of the people. Spring, summer, autumn and winter are all enjoyable and healthful seasons. In midsummer when the sun is over head, the temperature reaches an uncomfortable point, but as the sun dips behind the mountains, the cooling air of the Rockies displaces the heated air of the day, leaving the evenings and nights delightfully restful and refreshing. There has never been a case of prostration from heat in the state. While Montana does not advertise itself as a health resort, as its people are too busily and profitably engaged in their several occupations, and personally too healthy to revert to the subject, yet it has every climatic and natural condition that can contribute to the restoration of broken health. It is a land of varied altitude, of perpetual sunshine, of the purest air and water, and when these are combined to influence the recuperation of the invalid, convalescence is both sure and speedy.

The following analysis of a sample of mountain water is satisfactory testimony as to their purity:

**"Reported in Mgs. per Litre—Parts in 1,000,000.**

No.	AMMONIA		CHLORINE	TOTAL SOLIDS	NITROGEN AS NITRATES	NITROGEN AS NITRITES
	FREE	ALB.				
211	.02	.02	.00	406.00	.00	.00"

This water is remarkably pure, and there being in a million parts but two-hundredths of 1 per cent of free ammonia and albuminoid ammonia, is evidence of its healthfulness.

**"Free Ammonia**—This constituent results from the decomposition of nitrogenous animal and vegetable matter, and exists in the water in the form of a salt ammonium, from which the ammonia is easily set free. The test for ammonia is very delicate, the presence of one part of ammonia in 100-million parts of water being readily detected."

"This constituent and the following one, are regarded by most chemists as the most important upon which to base an estimate of the potability (drink value) of waters.

**"Albuminoid Ammonia.**—This represents the nitrogen present in the water in the form of nitrogenous animal and vegetable matter in a more or less advanced state of decay. The nitrogen is liberated from these compounds in the form of ammonia by the action of an alkaline solution of potassium permanganate.

**"Nitrogen in Nitrates and Nitrites.**—The presence of nitrates and nitrites indicates a contamination which occurred sufficiently long ago to allow the organic matter, particularly the nitrogen, as indicated by the test, to become oxidized. The nitrates represent a more complete oxidation than the nitrites, and, under similar conditions, a more remote source of contamination."

Taking the state as a whole, Montana has a greater variety of resources—the lavish gifts of a liberal Nature—than any other state in the Union, and each of these resources is abundant and free to those who will exert their



energy in making them productive of the greatest and safest returns. Montana offers unlimited and varied opportunities to the capitalist who desires to invest his money in lines that hold out as an inducement the largest profits and involve the minimum of risk; but as well, Montana offers homes to thousands—offers them homes on the most fertile prairie, bench and valley, where little capital and a willingness to work will soon establish a home of permanent and constantly increasing prosperity. In Montana the miner and prospector can find mineral in the greatest variety and abundance; the lumberman can find great belts of the finest timber; the farmer broad acres of the

most fertile soil, and the manufacturer abundant water power, and of all this abundance of Nature, one may have for the asking.

Montana is young in the period of her active development, and now has a population of but 243,329, but it is increasing the number of its inhabitants every day, and the per capita production of wealth exceeds by far that of every state or part of state, and a familiarity with its illimitable resources forces the conclusion that the near future will see it one of the greatest and wealthiest states of the Union.

And though one need look back but a few years to review the period of frontier experiences, the perspective of that epoch has been reached in one rapid stride, and the memories of those picturesque days have passed into the



A MOUNTAIN STREAM.

shadows of the retreating past, and taking their places in the busy activity of the day. In that one rapid stride of progress toward material advancement, cities have been built, counties have been settled, great mines have been discovered, prospected and developed, the largest mineral reduction and refining plants in the world have been established, a multitude of industries have been put in operation, farms have been established along the banks of every river and stream and on the bench lands, semi-arid districts have been made wonderfully productive with the waters of many a mountain stream, and prairie and hillside have been covered with flocks and herds—all pouring out a vast addition to the wealth of the world and bringing to the many hands that produced it, the comforts and advantages that prosperity insures. And now instead of the quiet solemnity and picturesque grandeur of the gulch that in-



spired the poet's fancy, there is nestled a busy city, and as the shadows of night are cast by towering mountains, the scintillating shafts of arc and incandescent light illumine the attractive scene, outlining magnificent modern structures, displaying the handsome interior of business houses that provide a particular public with everything that need and cultured fancy can desire, so that now, amid the rush of busy streets, the whirl of the electric car, the whistle of the factory, the smelter, mill and mine, and in the glare of electrical brilliancy, one is suddenly brought to a realization that now indeed there is no frontier; that what was, is past; that what is, is the busiest of life hustling amidst every modern facility for the rapid and economical adjustment of natural resources to the approved methods of production, and that in the activities of creating and accumulating wealth, its people have not neglected education or culture, but have established state and local educational institutions that will compare favorably with those of the oldest states, and they have erected edifices for these that would be a credit to any state or city.

Though there are many fertile horticultural and agricultural valleys in all of these, the mountain ranges pass through and occupy a good portion of Flathead, Teton, Missoula, Deer Lodge, Lewis and Clarke, Cascade, Ravalli, Beaverhead, Madison, Silver Bow, Jefferson, Granite, Broadwater, Meagher, Park, Carbon and Fergus counties, and in these are embraced the mining districts of the state, and they present the opportunities for those who desire to engage in mineral discovery and development. A large part of Cascade, Teton and Fergus counties extend from the mountains over the foothills and prairies, and this portion of them is confined to agriculture and stockraising. The Rocky mountains lie along the western portion of Teton county and embrace some of the richest mineral districts in the state. The southern part of Cascade county is occupied by the Belt range, and these are also rich in minerals. There are short ranges in Fergus county called the Judith and Snowy mountains, and these are rich in low grade gold ore that since the advent of the cyanide process has proved to be workable at a great profit, and in consequence, during the past several years, a number of properties have been opened and some large plants of this kind have been established and are being profitably worked.

All valuable mineral deposits in lands, both surveyed and unsurveyed, are free and open to exploration, location and purchase, and a citizen may locate one or more claims upon veins or lodes of quartz or other rock in place bearing gold, silver, copper, lead, tin, or other valuable mineral deposits. A quartz claim is six hundred feet wide, measuring 300 feet each way from the center of the lead, and is 1,500 feet in length along the lead, with the right to follow the dip of the lead outside of the side lines of the claim. The laws require that on making a discovery of a mineral lead or ledge, the locator shall open a cut or sink a shaft at least ten feet in depth or run a tunnel of the same length that will reveal the lead and at least one wall. Here he must post a notice of location and run the lines of his claim, setting stakes at each corner and on the sides, and must within ninety days record the notice of location at the office of the clerk and recorder in the county in which the claim is located. The location work done will hold title to the claim to the end of the calendar year, and thereafter one hundred dollar's worth of representation

work must be done on the claim during each calendar year for a period of five years, when application for a patent may be made. Affidavits of the representation work must be made each year and recorded in the county clerk's office. If a patent is desired before the expiration of the five years, the claim owner may at any time complete the representation work allotted for the

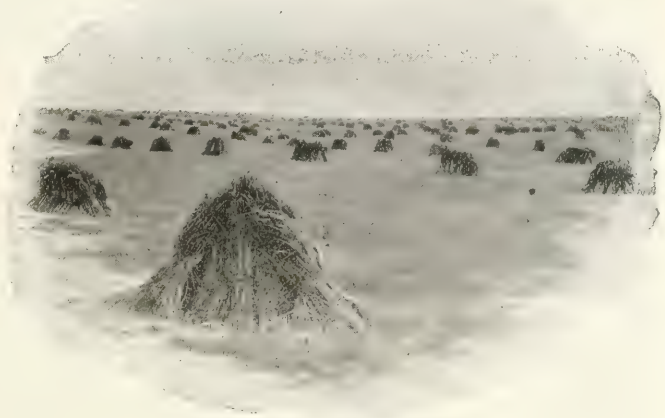
full period—\$500 worth—and secure his patent through application to the local land office, having the claim surveyed by a deputy surveyor, paying the land office the required fees and the payment to the government of five dollars per acre, or \$100 for the twenty acres embraced in the claim. The cash



IN THE OAT FIELD.

cost from the date of locating the claim to the receipt of a patent, aside from the annual representation work, will be about as follows: Notary acknowledgment of the location notice, \$1.00; recording of the notice, \$2.00; recording and acknowledgment of the annual affidavits of representation for five years, \$10.00; filing application for patent with the local land office, \$10.00; publication of application for patent (estimated), \$15.00; fees of the surveyor general's office, \$30.00; payment to the surveyor for making the survey (estimated), \$40.00; payment to the government at \$5 per acre, \$100.00, a total cash expense during the five year period of \$208.00. One person may

take any number of quartz claims, and each one is subject to the same annual representation work, but in the stated costs for finally securing a patent there is a considerable reduction per claim in several of the items given. Where there are several contiguous claims with a community of interests, the representa-



A MONTANA WHEAT FIELD.

tion work for the group may be done by one tunnel or shaft that is constructed for the development of the whole, and while this does not lessen the

cost of representation per claim, it allows the work to be done in one place and in this way accomplish actual development of the lead and takes the place to the extent of the representation, of the development expense that would have to be incurred under any circumstances.

In locating a gold or rock placer, 20 acres may be taken and the same representation is exacted and the same expenses incurred, except that in application for a patent the payment to the government for the land is but \$2.50 per acre. An association of eight persons may locate a placer of 160 acres, and in this case but \$100 worth of work is required to represent the entire claim for each year.

Coal may be located in 160-acre tracts and the law requires that coal shall have been discovered in place on the tract. It costs \$3.00 to file a declaratory statement, and this with the discovery work done, will hold the title to the land for fourteen months, at the expiration of which time the locator must make application for patent in the same manner as prescribed for quartz claims, and pay the government for the land either \$10.00 or \$20.00 per acre, the greater price being charged for coal lands within railroad limits, and the lesser price for such lands as lie without the railway limits.

All unlocated mineral lands are open to the prospector.

While there are thousands of square miles of the finest agricultural lands embraced in the valleys of every county that we have here classed as mountainous and mineral, the counties of Cascade, Carbon and Teton, aside from their mountain and mineral portions, and Fergus, Choctaw, Valley, Dawson, Custer, Yellowstone and Sweet Grass, may be classed as agricultural. Though there are large areas in these counties that may be rated as semi-arid, yet there are thousands of square miles that receive an abundant precipitation of moisture, particularly in Cascade, Gallatin, Teton, Fergus and Sweet Grass counties, much of their lands bordering the foothills of the mountain ranges. The other agricultural lands, with the exception of those of the low river bottoms whose subsoil is moistened continually with the waters of the river, require irrigation, but when placed under water produce with wonderful and unfailing abundance. As an inducement to the reclamation and settlement of these lands, congress in 1894 passed the Cady desert land act, giving the state title to one million acres of land, title to pass when the state shall have reclaimed the lands. In 1895 the state legislature accepted the offer of the general government made under this act, and the following session of the local assembly passed an arid land act creating an irrigation commission, authorizing it to issue bonds for the purpose of accomplishing the work of reclamation of the lands, and commendable progress has been made under its auspices. Now, however, an effort has become general to secure the aid of the general government in the erection of reservoirs along the mountain ranges for the purpose of conserving the waters of the early spring and the rainy seasons, and to construct main canals through the foothill districts leading to the arable areas, and there is every indication that this will be accomplished. Until within the past three or four years, irrigation has been confined to diverting water from the rivers and lesser streams over the contiguous bottom lands, but there are now a number of canals that water considerable districts of the higher lands. The more prominent of these canals



are the Minnesota & Montana Land Improvement Company's canal in the vicinity of Billings; the Crown Butte, with water taken out of Sun river west of Great Falls; the Dearborn canal, in Lewis and Clarke county, one of the first canals of any importance in the state; the Cascade Land Company's canal, north of Great Falls; the Miles City canal, in the neighborhood of the city of that name; the Manhattan canal, in the Gallatin valley; the West Gallatin canal, also in Gallatin county; the Bitter Root canal, in Ravalli county, and the Conrad Brothers' canal, in Teton county. The aggregate land irrigated by these canals is estimated at over 250,000 acres. In past years there has

been very little land fenced, but of late years the farmers have been inclosing their holdings. The foothills and high ranges, however, are yet and always will remain open and free for the stock of every farmer and rancher to range upon. The products of the farm are the same as those of the middle states, but the yield, especially in the cereals, is much more abundant. Grasses grow luxuriantly and the yield of hay from irrigated lands is enormous. The more common crops are wheat, oats, barley, rye and buckwheat. Flax is a sure and abundant crop, but there is little home demand for it, and as the market is so distant, little attention has been given to its culture. This will not become an important



OUR WATER SUPPLY.

product of the farm until a linseed mill is established to consume the the product. There is an exceptional opening for the profitable investment of capital in a Montana linseed oil mill. Vegetable and root crops are abundant, and in the southern valleys on both sides of the main range the larger and smaller fruits are grown in the greatest abundance. In Missoula, Flathead and Ravalli counties, fruit growing is nearing the front rank of importance, the apples, plums, peaches, cherries, strawberries, etc., of these districts being noted for their excellence of flavor and preservative qualities.

A special advantage to all the agricultural interests of Montana is that the home demand for farm products of every nature far exceeds the supply, insuring a cash market and high prices. As the greater part of the population of the state will be for all time occupied in mining and attendant indus-

tries, the conditions of the market for agricultural products, as noted, will always remain.

There are several ways in which the intending settler may obtain lands:

By locating on public lands in the districts mentioned where irrigation is not necessary.

By locating on public lands that require irrigation, but so located that a water appropriation may be made and the water diverted without incurring too great an investment.

By leasing or purchasing lands that are embraced in private canal systems.

By purchasing improved lands carrying water rights.

A brief synopsis of the laws governing the location of lands may be of interest to the investigator of Montana's agricultural advantages, and is as follows:

A homestead may be secured by any person who is the head of a family, or who has arrived at the age of twenty-one years, and is a citizen of the United States, or has filed his declaration of intention to become such, and who is not the proprietor of more than 160 acres of land in any state or territory, is entitled to one-quarter section (160 acres), or less quantity of unappropriated public land, under the homestead laws. The applicant must make affidavit that he is entitled to the privileges of the homestead act, and that the entry is made for his exclusive use and benefit, and for actual settlement and cultivation, and must pay the legal fee and that part of the commissions required, as follows: Fee for 160 acres, \$10; commission, \$4 to \$12; fee for 80 acres, \$5; commission, \$2 to \$6. Within six months from date of entry the settler must take up his residence upon the land, and reside thereupon and cultivate the same for five years continuously. At the expiration of this period, or within two years thereafter, proof of residence and cultivation must be established by four witnesses. The proof of settlement with the certificate of the Register of the Land Office is forwarded to the General Land Office at Washington, from which patent is issued. Final proof cannot be made until the expiration of five years from date of settlement, and must be made within seven years. The government recognizes no sale of a homestead claim. After the expiration of 14 months from date of entry the law allows the homesteader to secure title to the tract, if so desired, by paying for it in cash and making proof of settlement, residence and cultivation for that period. The law allows only one homestead privilege to any one person, but under act of March 2, 1889, section 2 provides in certain cases, when the first homestead was necessarily abandoned, that a second homestead may be made.

An unmarried woman, of age, can take the benefit of the homestead law. If she marries before she has acquired the title, and continues her residence on her claim, she can proceed to prove up at the proper time, the same as if she had remained single, but husband and wife cannot secure separate tracts by maintaining separate residence at the same time. All the sons and daughters of a family, who are of age, are entitled to take up land under the United States land laws.

A soldier who has served in the army or navy during the War of the Rebellion for over 90 days, can obtain 160 acres of any of the public lands by

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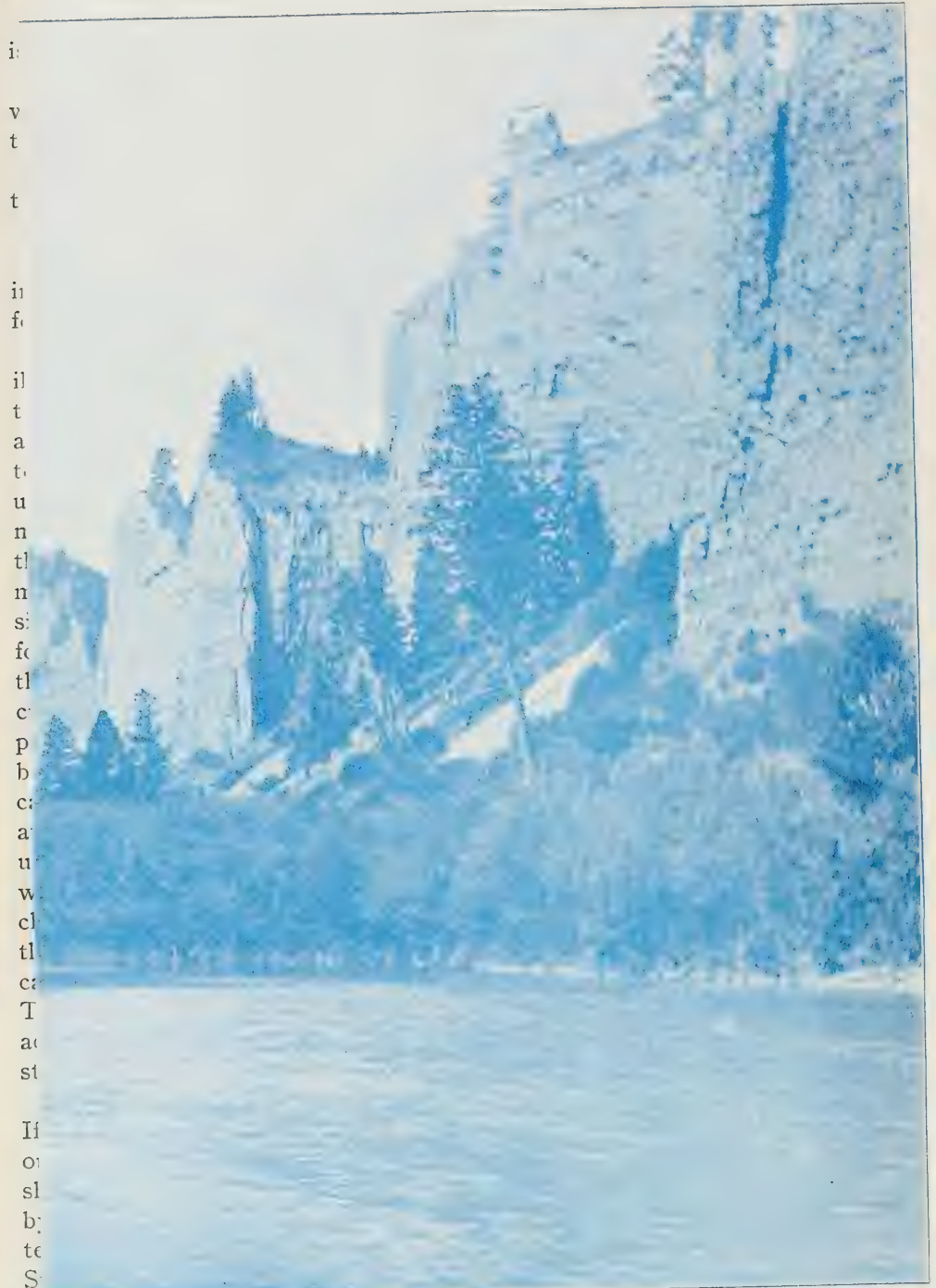
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10. SCENERY OF MONTANA.



filing (himself or by an attorney) a declaratory statement, and within six months thereafter filing his affidavit and application, commencing settlement and cultivation, and continuing the same for five years, less that time he served in the army or navy, but such time in no case to exceed four years. His widow can take advantage of the above. In case of his death in the army, or discharge therefrom on account of wounds or disability incurred in the line of duty, the term of his enlistment is deducted. In case of the death of the soldier, his widow, if unmarried, or in case of her death or marriage, then his minor orphan children, by a guardian duly appointed and officially credited at



SECURING GOLD WITH A "ROCKER."

the Department of the Interior, shall be entitled to all the benefits given to soldiers under the homestead laws.

Under the desert land act, any citizen of the United States, or persons who have declared their intention to become such, and who are also residents of the state or territory in which the land sought is situated, may file a declaration, under oath, with the Register and Receiver of the land district in which any desert land is situated, that he intends to reclaim a tract of desert land, not exceeding 320 acres, by conducting water upon the same, within four years. At the time of filing this declaration a fee of 25 cents for each acre of land proposed to be so reclaimed must be paid.

At the time of making the declaration the land taken up under this act must be particularly described, if surveyed, or, if unsurveyed, must be described as nearly as possible. The party shall also file a map of said land, which shall exhibit a plan showing the mode of contemplated irrigation, and which plan shall be sufficient to thoroughly irrigate and reclaim said land and prepare it to raise ordinary agricultural crops, and shall also show the source of the

water to be used for irrigation and reclamation. At any time within four years, upon making satisfactory proof to the Register and Receiver of the reclamation of said land, and the expenditure thereon for improvements of \$1 an acre each year for three years, and proof of the cultivation of one-eighth of the land, and upon the payment of the additional sum of \$1 per acre, a patent shall be issued. A claimant must also file with the Register during each of said three years proof by the affidavits of two or more credible witnesses that he has made such expenditures. He may, however, prove up earlier whenever he can make the required proof of reclamation, cultivation and expenditure to the aggregate of \$3 per acre. All lands, exclusive of timber and mineral lands, which will not, without irrigation, produce some agricultural crop, are deemed desert lands. Residence on the land is not required.

Under the timber and stone act, any citizen of the United States, or one who has declared his intention to become such, can acquire not to exceed 160 acres; land must be chiefly valuable for timber or stone, containing no valuable deposits of gold, silver, copper, coal or cinnabar. Applicant is required to file sworn statement with Register and Receiver that he has made no prior application; to designate the tract required by legal subdivisions, setting forth its character as above, and that it is for applicant's own use and benefit. Such application will be published sixty (60) days when the applicant files further proof of the character of the land, paying \$2.50 per acre therefor. Married women can purchase in Montana.

There are United States land offices at Miles City, Custer county; at Lewistown, Fergus county; at Bozeman, Gallatin county; at Helena, Lewis and Clarke county, at Missoula, Missoula county, and at Kalispell, Flathead county. The homestead affidavits can be made before the clerk of the District Court at any county seat, or before any United States Commissioner in the state, and the journey to the land office be saved.

There are over twelve million acres of timber lands in the state, not counting the smaller disconnected bodies and the lesser belts that fringe the several streams. The forests that contain timber that is of commercial value are in the mountainous mineral districts. Nature appreciated the necessity of an abundance of heavy timber in all mining operations and placed it in greatest plenty and finest quality about every point of consumption. Aside from the valleys, all the counties lying along the Rocky mountains and west of the ranges, are heavily timbered.

The fuel supply of the state is more than abundant, the coal measures being the most extensive in the west. Beds of an excellent quality of bituminous coal have been developed in nineteen of the twenty-four counties of the state. In several of the counties, notably Cascade, Carbon, Park and Gallatin, very extensive mines have been worked for some years and others are being continually opened, and there are extensive coal measures in Teton, Choteau and Fergus counties that have not as yet been more than prospected to ascertain their extent in a general way. It is estimated that in the coal fields of Cascade county, where there are several large coal camps turning out hundreds of car loads of coal every day, that the average yield to the square mile is six million tons. As there are thousands of square miles of



coal lands in the state it is apparent that scarcity of either domestic or commercial fuel will not be a question that will bother this or the next generation.

The first discovery of gold in Montana was made in what is now Deer Lodge county, in 1852. The creek upon which the precious metal was discovered was named Gold creek, and bears that name now. Six years later other gold discoveries were made in the same neighborhood by the Granville Stuart party. In 1862 the Stuart-Anderson party developed placer claims near the present location of the town of Pioneer. The rich returns of their mines was really the incentive to further prospecting, discovery and the de-



LAKE COMO, RAVALLI COUNTY.

velopment of the mines of Montana. Following the opening of the Pioneer placer claims, came the discovery of rich ground at Bannack, Alder, Ophir, Last Chance, now the location of the city of Helena, Confederate, Pilgrim Bar, Silver Bow, Bear, Elk, Cave, Lincoln, Cedar Creek, and several hundred other places, all of which produced lavishly of the coveted metal, and in the course of a few years added hundreds of millions of dollars to the gold supply of the world. During this period of placer mining, discoveries of the other metals that are abundant in the mineral districts were made, but there was little development of the deposits until the advent of transportation facilities. Allen & Arnold are credited with reducing the first gold quartz in Montana in a mill erected at Bannack, Beaverhead county, in 1862-3. It was "home-made," the lumber and iron being obtained from dismantled wagons that had been brought "across the plains." It had six stamps, of 400 pounds each, and was successfully run by water on free ores from the Monitor lode. The first clean-up was made in October, 1864. The first steam quartz mill, 12 stamps,



was built and operated at Summit, at the head of Alder gulch, Madison county by the Idaho Mining Company, commencing operations December 28, 1865. The first quartz mill was established at the present location of the town of Philipsburg, in 1867, and the first successful silver smelter was erected at Argenta during the same year. There were too many obstacles to overcome, however, and the silver industry did not become of any importance until 1876, when the recorded output was \$1,132,976, and the annual production did not reach the two-million figure until 1879, but after that year there was a steady and rapid increase until the output in 1892 was \$22,432,323. The production of silver for 1899 was 16,850,754.85 ounces, and at a coinage value worth \$21,786,834.52, but at the market value, which has been the only value since it has been deprived of a monetary value, was somewhat less than half of that figure. The production of silver is now almost wholly a by-product of other metals, such as gold, copper and lead.

The first discovery of copper was made in 1864, by two prospectors who were in search of gold in the vicinity of the present "Greatest Copper Camp on Earth"—Butte. The first practical development of a copper prospect was made in 1866, in the same locality, a shaft being sunk on what is now the Parrot mine, and during the fall of the same year, a furnace was established. The wealth of the copper deposits at Butte was first recognized officially by United States Commissioner of Mining and Statistics Raymond, in his report of 1870. From this date to the present time the development of the copper deposits has been rapid, and at this writing the state contains not only the richest copper mines in the world, but also the largest and most modern reduction plants, employing thousands of men and turning out millions of dollars' worth of refined copper annually.

And notwithstanding the great mineral production of the state as shown by tabulated statements that appear on other pages of this volume, the mineral development, and even the mineral prospecting of the state has scarcely commenced. Only a few years ago it was generally believed that the Butte district contained the only valuable deposits of copper, but within the past several years copper has been found in a dozen other districts of the state, and their present development warrants the assertion that all of them will prove to be rich in the profitable metal. This may also be said of gold, silver and lead. And it must be borne in mind that while the mineral belt of Montana reaches from the southeast corner of Carbon to the northwest corner of Flathead county, spreading over very nearly one-half of the state, that but little of this great area has been even superficially prospected.

The state financially is on a cash basis, having no stated outstanding indebtedness, and on the date of this publication had over half a million dollars in its different funds, the distribution of which may be seen in the detailed statement of the treasury department, in the statistical pages of this volume, where also may be found the sources of the state's income. All warrants have been called up to date. The permanent school fund has \$340,495, of which \$119,417 is in cash, and the balance is invested in interest-bearing securities. The reader may search the reports of every other state, but he will not find another with as good financial standing and condition.

There is no state in this Union; there is no country in any continent, that

presents so inviting a field for everybody of whatever calling, for the investment of capital or of energy, or of both. Attention has been called in a general way to its multiplicity of resources, and now if the reader desires, he will find these more specifically mentioned in connection with the particular localities in which they are located.

### MONTANA'S RAILWAYS.

For a mountainous state, and one that has been going through the process of active development for such a short period, Montana is well provided with railway facilities. The Northern Pacific is the pioneer line and traverses the center of the southern part of the state from east to west, and has fifteen



A MOUNTAIN PLACER FLUME.

branches that extend north and south into different portions of the state, all heavy feeders for the trunk line. The more important of these branches are the Rocky Fork line, that runs from Laurel to Red Lodge, with a spur to Gebo from Willets, traffic for the branches being furnished by the extensive coal mines of these towns; the Cokedale branch, that runs from the main line a short distance to the coal mines and coke ovens of Cokedale; the Red Mountain, that connects the rich mines of Rimini with the main line at Helena; the Boulder branch that runs south from Helena to Boulder, the county seat of Jefferson county, tapping the rich and highly cultivated Boulder valley, and furnishing transportation for the wood that is taken from the neighboring mountain sides and marketed in the smelter towns and other cities of this part of the state, and an extension runs from Boulder to Elkhorn. The branch that connects the Yellowstone National Park with the main line runs from Livingston to Gardner, at the northern line of the park. The Butte line is

a branch of the Northern Pacific that runs from Butte to Logan, and the Gaylord and Ruby Valley line, that runs from Whitehall to Gaylord, a smelter town. The Red Butte runs from Sappington to Norris and then to Pony. The Marysville line branches from the main line at Clough Junction and runs to Marysville, and the Philipsburg line runs from Drummond to Philipsburg. The Bitter Root branch starts from Missoula and traverses the fertile valley of that name as far as Grantsdale, making one of the most productive sections of Montana tributary to the Northern Pacific. Another important branch of this line is the Coeur d'Alene line, that also extends from Missoula, running in a northwesterly direction to Spokane. The last branch of this line is the Montana Union, that runs from Butte to Garrison.

The main line of the Great Northern traverses the northern part of the state east and west for its entire length, and its most important branch is the Montana Central, which leaves the main line at Havre and runs southwest to Great Falls, and thence in the same direction to Helena and Butte. Branching from Great Falls, the road has lines running to the coal camps of Sand Coulee, Stockett and Belt, and to Neihart, the great silver camp, and to Baker.

The Oregon Short Line runs from Ogden, Utah, north through the southwestern part of the state to Butte, connecting the state with the Union Pacific system.

The Great Falls & Canada runs from Lethbridge, Alberta, Canada, south to Great Falls, traversing a large stock country and connecting the railway systems of the state with the Galt coal mines at Lethbridge.

The Butte, Anaconda & Pacific runs from Anaconda to Butte, and while it is a short line it can show up more tonnage to the mile the year around than any other railroad in the country. It hauls the raw material to and the finished product from the Anaconda copper smelters.

The Montana railway runs from Lombard in Gallatin county, to Leadboro, where there are rich silver-lead mines, and on into the grazing and farming sections in Meagher county, the temporary terminus now being Merino, or Harlowton, the railroad name. This line will no doubt soon be extended to Billings.

The Big Horn Southern runs south from Billings, connecting with the Burlington & Missouri River system.

The Yellowstone Park railway is now under construction. This line will run from Bozeman east over the mountains to the coal mines near Chestnut, and south from Bozeman to the National Park, opening up an entirely new mineral, timber and agricultural district.



## Mines and Minerals of Montana.

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The State is a Mineral World in Which Almost Every Mineral is Found in Abundance—Now Produces 23 1-3 Per Cent of the Copper of the World\* and 61 Per Cent of the Copper of the United States—Its Gold, Silver and Lead Product—Other Metals—Great Operating Coal Mines.

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When one studies the present mineral product of Montana and then considers that many of its minerals are not being produced at all as yet, and that but the smaller fraction of the mineral districts of the state are developed and producing, it can not be wondered that the state has come to be termed "The Treasure State," and that the name has come to be accepted as the assertion of fact. One-half of the area of the state may be classed as mineral, and it is safe to say that there is not one-half of one per cent of the mineral acreage containing valuable deposits of mineral, that is now being worked. New mines and new districts are constantly being developed, however, and the next decade will witness an increase in the mineral production of Montana that will eclipse the record of any mineral location on earth.

And in considering its great mineral deposits, their variety and easy accessibility, the important fact that the mineral districts have the most abundant timber supply, that beneath the benches of the foothills are hundreds of thousands of acres of the best furnace and coking coal, and last, but perhaps the most profitable of all in the elements of mineral production and reduction is the wonderful abundance of cheaply utilized water power. These water powers range from that afforded by the rapid fall of the mountain stream to the great volume of the mighty Missouri as it falls over the precipitous cascades of Great Falls. The initial water power at Great Falls is 350,000 horse power, and all of this can be utilized with a comparatively small investment of capital. Canyon Ferry, a short distance east of Helena, has an extensive water power, and there are others in the state of considerable proportions. But aside from these large powers, there are innumerable mountain streams in every mining district that are conveniently placed and afford from a few hundred to five-thousand horse power, and while the larger powers will, as they are proving in Great Falls, be the cause of building large mineral reduction cities that will be founded on the milling and smelting plants that will be attracted by the opportunity to secure any desired power and electric current, as the mineral districts are developed, these water powers will be utilized and will materially aid in the net profits of the institutions employing them.

It is not the intention in this article to devote any considerable space to the separate mining districts or cities of the State, as these will be treated separately and more satisfactorily to the reader in articles devoted to each. The reader, however, must not miss the articles on Great Falls, where the largest available water power of the continent is located and where they have one of the most extensive and modern copper reduction and refining plants of the world, a great silver reduction plant and many other similar attractions. And then there is Butte, "The Greatest Copper Camp on Earth," that



PANNING THE GRAVEL.

is fully entitled to the name as well as the reputation, for the mines there come very nearly producing a quarter of the copper of the world, and Anaconda with its greater reduction and refining works, and there are smaller but important mineral districts and towns, and these will have special attention called to them on other pages of this volume.

In 1899, Montana produced in values of gold, silver, copper and lead, \$68,457,307.54, an increase of over seventeen million dollars over the previous

year. The copper product of the world for 1899 was 468,463 long tons, or 1,049,357,120 pounds, and of this the United States produced 386,410,356 pounds, which is thirty-seven per cent of the entire product. Of this copper Montana produced 245,602,314 pounds, or 23 1-3 per cent of the copper product of the world and 61 per cent of the copper of this country. It must be borne in mind, however, that the mineral development of Montana is only in its infancy, and that the development of the future will be much more rapid than that of the past, and that the present mineral output of the state, though reaching away past a half a hundred million dollars in value, will be but a bagatelle of the output of the future, and that in not a very distant future either.

Hon. Eugene B. Braden, who was assayer in charge of the United States Assay office in this city during and previous to the fiscal year 1899, says the value of the precious metals won by the washing and milling and smelting of the ores and gravel mined in Montana during the year, was not only the largest in its history, but that the increase was a very considerable item.

The following tables give the quantity and the value of each of the metals, gold and silver being based on their coinage value, and copper and lead on the average quotation for the year.

Description	Quantity.	Value.
Gold, fine ounces .....	233,126.717	\$4,819,156.95
Silver, fine ounces (coinage rate) .....	16,850,754.85	21,786,834.52
Copper, fine pounds, at \$16.67 per hundredweight ..	245,602,314	40,941,905.74
Lead, fine pounds, at \$4.47 per hundredweight ..	20,344,750	909,410.33
Total .....		\$68,457,307.54

A comparison of these figures with corresponding data for 1898 shows variations as follows:

Metals.	1898.		1899.		Increase.
	Quantity.	Value	Quantity.	Value.	
Gold, fine ozs ..	253,867.787	\$5,247,912.91	233,126.717	\$4,819,156.95	* \$428,755.96
Silver, fine ozs ..	14,818,661.98	19,159,482.17	16,850,754.85	21,786,834.52	2,627,352.35
Copper, fine ozs.	216,979,504	26,102,616.29	245,602,314	40,941,905.74	14,839,289.45
Lead, fine ozs. ..	21,403,592	809,055.78	20,344,750	909,410.33	100,354.55
Total .....		\$51,319,067.15		\$68,457,307.54	\$17,138,240.39

\* Decrease.

The above is a gain of more than 33 1-3 per cent in the value of the production over the year 1898. Except that of copper the several changes in value noted above are those naturally attendant upon the mining industry. Owing to general industrial activity in 1899 and the consequent heavy demand for copper the high price that prevailed at the opening of the year was maintained throughout. This fact, together with the increase of nearly 28,500,000 pounds in the production of the metal itself, explains the enormous gain of nearly \$15,000,000 in value of this metal alone.

The price above quoted for 1899 is that of electrolytic copper. The



Montana product is of this kind. In former years this quotation was not obtainable, and, necessarily, in computing the value of the Montana output the selling price for "lake copper" was used. This is higher than the price for electrolytic copper, and had it been used in arriving at the value of the Montana copper in 1899 the gain would have been more than \$18,000,000 over 1898. This latter figure, therefore, more nearly represents the actual value of the increase in copper during the year.

The amounts of gold taken from placers and originating in milling, cyaniding, copper, lead, and smelting ores during 1899, when compared with those of the previous year, were as follows:

Classed as—	1898.		1899.		Increase or Decrease.
	Fine Ozs.	Value.	Fine Ozs.	Value.	
Placer bullion . . . . .	31,662.452	\$654,520.97	28,827.617	\$595,919.73	*\$58,601.24
Mill bullion . . . . .	80,590.965	\$1,665,963.10	64,070.159	1,324,447.73	*\$41,515.37
Cyanides . . . . .	19,235.180	397,626.46	38,247.583	790,647.71	**\$393,021.25
From copper ores . . . . .	51,408.020	1,062,698.09	55,706.317	1,151,551.77	**\$88,853.68
From lead ores . . . . .	8,369.027	173,003.14	7,815.539	161,561.53	*\$11,441.61
In smelting ores . . . . .	62,602.143	1,294,101.15	38,459.502	795,028.48	*\$499,072.67
Total . . . . .	253,867.787	\$5,247,912.91	233,126.717	\$4,819,156.95	.....

\* Decrease.

\*\* Increase.

It will be noted that the most attractive features in the production of gold in Montana during 1899 were furnished in the mining of copper ores and in the results achieved by the cyanide process. Since the employment of this process in the winning of gold from tailings and low-grade ores on a profitable basis in Montana, the annual returns from this source have each year been practically double those of the preceding year, until it now reaches the large figure given above. It is not likely that this ratio of growth will be continued in the immediate future, but it is safe to predict that the creditable production already achieved will be maintained, and that eventually a greater and more profitable field for cyanide, in the winning of gold, will be opened in Montana, the importance and extent of which can not at present be accurately predicted.

The gold taken from the cupriferosus ores, almost all of which come from the Butte district, was greater in quantity during 1899 than the same yield had been in 1898, due to the larger tonnage of ore mined, and the consequent greater production of the several precious metals contained.

The diminished yields of gold in several of the classes of ore noted are explainable in various ways. The decrease in the amount of gold from placers has been a small but constant one for several years. Because of the unsettled conditions existing some years ago, many who had followed quartz mining turned to the washing of gold from the graves that abound in the state. The records of the government assay office at Helena show as a result that the number of small and independent producers became largely increased at that time, until in 1896 the maximum of this class was reached. Since then, owing to the opening of the new Alaskan gold fields, and the improved business conditions of the country, these small placer miners have diminished, and comparatively few of them were working in 1899.

The lessened output of gold from mills arose principally in the district around Marysville. In that locality some of the mills were idle throughout the entire year, while the large mills of the Montana Mining Company, Limited, were not worked at full capacity, and were partially closed down for various intervals. In some instances the cyanide process is also replacing the stamp mill and amalgamation.

The heaviest decrease in the amount of gold from any of the classes of ores was for that contained in the smelting ores. Many of the mines of the state did not hold up to their excellent showing of the previous year. This was especially true of properties in Madison county.

The detailed origin of silver in 1899, when compared with corresponding figures for 1898, show the following results:

Classed as—	1898.		1899.		Increase or Decrease.
	Fine Ounces.	Coining Value.	Fine Ounces.	Coining Value.	
Placer bullion . . . .	4,021.33	\$5,199.24	3,592.78	\$4,645.20	*\$554.04
Mill bullion . . . .	1,028,619.10	1,329,931.77	2,260,892.07	3,479,133.17	**2,149,201.40
Cyanides . . . . .	78,006.95	100,857.47	97,684.83	126,299.58	** 25,442.11
From copper ores.	9,495,911.71	12,277,542.46	9,890,572.37	12,787,810.73	** 510,268.27
From lead ores . . .	2,763,991.44	3,573,645.50	2,504,695.24	3,238,393.85	*335,251.65
From smelting ores	1,448,111.45	1,872,305.73	1,663,317.56	2,150,551.99	** 278,246.26
. Total . . . . .	\$14,818,661.98	\$19,159,482.17	16,850,754.85	\$21,786,834.52	.....

\* Decrease.

\*\* Increase.

Net increase, \$2,627,352.35.

This table presents a largely increased output of silver as having been a feature of the year's production. The amount won in placer workings is of no importance, being small at best and varying annually with the gold from the same source. The decrease of silver from lead ores was due to the lessened extraction of this product from the mines of the state. The improvement in the amounts taken from the products treated in the cyanide mills and from the copper ores has the same explanation as that already set forth for the increases of gold from the same sources. The large gain in the silver won in the mills of the state was because of a renewal of operations by plants that had been idle for years. Most important among these were those of the granite and bimetallic properties at Philipsburg, between whom a consolidation had been effected in the interest of economy in 1898, and a resumption of mining and milling operations undertaken. It is to this work at Philipsburg that a large percentage of the total gain in the silver output for 1899 is due.

The increase in the amount of copper produced in 1899 came from the larger extraction and reduction of Butte ores during the year, the conditions at both mines and reduction works having been favorable for such a showing. A considerable stock of copper was also held in stock at the close of the previous year by the refineries. This was not shown as production in 1898, but having been marketed in 1899, it is here treated as having been produced in the latter year.

Copper is the paramount feature of the mining industry in Montana. More than 80 per cent of the total values won in the state during 1899 came

from the mines at Butte in the shape of gold, silver and copper. The effect on conditions, both local and general, is enormous. While the number who find direct employment in mining and reducing the copper ores reaches into the tens of thousands, it is not greater than those indirectly benefited by the manufacture and sale of the necessary supplies for these employes and for the mines. The towns of Butte, Anaconda and Great Falls, having a combined population of more than 85,000, exist largely to minister to the mining and smelting industries connected with copper mining. But more important than is all this great advantage to Montana and to the commercial life of the country, is the effect on the industrial progress of the world.

The maintained high price for copper throughout 1899 proves that the



STATE SCHOOL OF MINES—BUTTE.

demand for this metal is genuine and the supply limited for immediate needs. This latter fact, too, is proven in that while the production has constantly increased there has been no accumulation of public stocks, and shows that the industrial consumption of the metal has at least kept pace with the production. Nearly one-quarter of the world's supply of copper in 1899 came from Montana. The mines of this state, therefore, have made possible with their output of copper the expansion of the electrical industry, especially in installations for power transmissions, of shipbuilding, and of marine engineering, besides many other industries, among which are the manufacture of structural materials and conveniences for domestic and public use. But for the Montana copper to make the supply as large as it was in 1899 the advancement in all of these branches would have been delayed and in some cases even prohibited.

The mining of lead in Montana continues as the least important of the



several branches of mining, the amount of the metal secured having been less in 1899 than for several years previous.

**Beaverhead County.**—This county in 1899 yielded the following metals:

Description	Quantity.	Value.
Gold, fine ounces .....	7,822.485	\$161,705.11
Silver, fine ounces, (coinage value) .....	253,262.01	327,449.87
Copper, fine pounds, at \$16.67 per hundredweight ..	165,719	27,625.36
Lead, fine pounds, at \$4.47 per hundredweight ..	1,038.894	46,438.56
<b>Total</b> .....		<b>\$563,218.90</b>

The above figures show largely decreased values from those of the output for the previous year. They originated from the districts at Glendale and Bannack. The operations at the former place were chiefly those of the Hecla Consolidated Mining Company, and included the mining, milling and reduction by smelting of ores. The extensive operations of this company have continued over a period of many years and present an unbroken record of profitable results. In more recent years, however, the ore supply has been uncertain, and this has materially curtailed their production.

The operations at Bannack were confined principally to the dredging of Grasshopper Creek for placer gold. This was the scene of the first successful work in Montana of handling gravel by machinery, and for some years now the several plants at this point have annually taken a considerable quantity of gold from ground that it had not been practical to reach by the earlier and more primitive methods of washing, Bannack having been one of the first places that gold was discovered and placer mining commenced in the state. It is probable that a considerable yield of gold will come from the Bannack dredges in 1900. Some quartz mining is also done in the vicinity of Bannack, the ore found carrying free gold, and is worked in stamp mills.

**Broadwater County.**—The precious metals taken from this county in 1899, were as follows:

Description	Quantity.	Value.
Gold, fine ounces .....	8,262.627	\$170,803.66
Silver, fine ounces, (coinage value) .....	144,948.35	187,407.96
Lead, fine pounds, at \$4.47 per hundredweight ..	1,088,036	48,635.21
<b>Total</b> .....		<b>\$406,846.83</b>

The output of precious metals from this county is also largely decreased from the figures of the previous year. The production originated from all sections of the county, the principal camps being those at Winston, Hassel, Radersburg and Diamond. The largest decrease comes from the Winston district, where the heavy producers of the previous years were idle or were only able to work at a much lessened capacity. The development of the mines at this camp, however, was earnestly prosecuted, and at the close of the year conditions at the East Pacific and other properties were believed to be most favorable for an early return to the larger production of former years.

The output from the Hassel district was mostly gold bullion from the Diamond Hill mines. This property consists of a large deposit of a low-grade milling product carrying gold, and equipped with a complete and modern stamp mill. An insufficient supply of water for power to run the mill has greatly interfered with profitable operations and curtails the work so that it can only be carried on during the few spring months when the water is more ample. Should this obstacle eventually be overcome it is probable that this property will add considerably to the output of gold in Broadwater county. The present location of the mill makes fuel for steam power sufficiently expensive to prevent the low values contained in and savable from the ores by milling paying any margin of profit above expenses. Considerable prospecting of various discoveries about Hassel has been done, and the ultimate solution of the power problem at the Diamond Hill mines will bring the district into new prominence and tend to place some of these obscure claims among the producing and active mines of that section.

The Radersburg district continued an output of values in 1899 but little changed in quantity and amount from its output of recent years. Although at one time it was a very active and largely producing camp, it has now settled down to the steady and profitable working of its older properties, the principal of which are the Keating and Blacker mines. Recent discoveries in the district have as yet been unimportant from the standpoint of actual production.

Diamond City is situated near Confederate Gulch, the scene of a very rich placer deposit that was worked extensively in the earliest days of Montana mines. From its gravels about \$19,000,000 in gold dust has been taken since its discovery. Operations in 1899 were confined to the re-working of portions of the old ground in a small way. A company of Milwaukee capitalists control the greater portion of the gulch, and their winnings in 1899 were the most important at this point. Besides the work done by this company, a number of individuals were washing for gold, their gains varying with the time engaged and the richness of the ground attacked.

While the major part of the production of Broadwater County comes from the above four districts, there are a number of other localities where work has been followed successfully. From the vicinity of Townsend the aggregate of placer gold secured in small lots by individual miners was considerable.

**Cascade County.**—The precious metal contents of ores mined in this county during 1899 were as follows:

Description	Quantity.	Value.
Gold, fine ounces .....	2,128.526	\$44,000.54
Silver, fine ounces, (coinage value) .....	919,723.21	180,086.57
Lead, fine pounds, at \$4.47 per hundredweight .....	3,810,679	170,337.35
Total .....		1,394,424.46

The above value is almost double that of the 1898 product, and shows that conditions at Neihart and Barker, the leading metal-producing districts

in the county, are highly prosperous. The properties at these camps are distinctively silver-lead producers, and include the Broadwater, Florence, Big Seven, and other well-known mines. The future is promising for a continued large output of the above metals by the mines of Cascade county.

The city of Great Falls is in Cascade county. It is located near the series of rapids that have been formed in the Missouri river. Because of the world-famous reduction works located here, it plays an important part in the production of precious metals in Montana. The enormous water power at this point has been but partially developed and utilized in the location and erection of the mammoth copper smelter and refinery of the Boston and Montana Consolidated Copper and Silver Mining Company and the Great Falls plant of the American Smelting and Refining Company.

The former treats the great tonnage of ore that the company mines from its Butte properties. Many freight trains are daily employed to haul this ore to Great Falls for reduction into pure copper bars. The distance from the mines to these works is 178 miles through a mountainous country and over the main range of the Rocky mountains, where the heavy and long grades and tunnels are frequent. The expense of this long haul is justified by the lessened cost of treatment because of the water power here available for the operation of these works. In 1899 the output of copper by this company was second in Montana only to that of the Anaconda Copper Mining Company, and the activity created alike for the laboring, the railroad, and the business man was the reason of the prosperity and growth of Great Falls.

The Great Falls plant of the American Smelting and Refining Company is also an important factor in the general prosperity of that city. This is a custom smelter for the purchase and reduction of ores. At no time has its operations been greater than they were in 1899. Because of the cheap power afforded by the water at this point the company who own and operate it find it advantageous to smelt at these works all products purchased by them in Cascade county and northern Montana, as well as a large percentage of the silver-lead ores from the mines of British Columbia.

**Deer Lodge County.**—Below is a table showing the production of metals in this county during 1899:

Description	Quantity.	Value.
Gold, fine ounces .....	10,349.123	\$213,935.36
Silver, fine ounces, (coinage value) .....	4,493.37	5,809.60
Copper, fine pounds, at \$16.67 per hundredweight .....	50,000	8,335.00
Total .....		\$228,079.96

The above values are a heavy decrease from the amounts credited to this county in past years, but due to the segregation by the state legislature at the beginning of the year of the northern portion adjoining the main range of the Rocky mountains, wherein was situated the Bald Butte and other producing mines, and the addition of it to Lewis and Clarke county. Since such division the output from this territory has been credited to Lewis and Clarke county. But for this action of the legislature the production would have been



quite close to that of 1898; so that what is now Deer Lodge county maintained about the same production as in previous years. The product consisted of placer gold and mill bullion from the district contiguous to Deer Lodge city and of mill bullion from Coloma, Cable and elsewhere.

The city of Anaconda, the location of the famous smelters and refinery of the Anaconda Copper Mining Company, is in Deer Lodge county. These works are the largest of the kind in the world and give employment to many hundreds. They were in full operation throughout the year. Numerous improvements in the plant and replacement of old methods by new were made to keep the works at their highest efficiency.

The plant at Anaconda comprises what is known as the upper and lower works—the converter plant and the refinery. All are located on the hillside below and overlooking the city. Prior to 1891 rail communication between Butte and Anaconda was by the Montana Union railway. Rates being unsatisfactory and an adjustment not being accomplished, the Anaconda Company built and now controls the Butte, Anaconda and Pacific railway between its mines and works, a distance of 28 miles. Owing to the consolidation of the interests of several of the Butte mines in 1899 the daily tonnage of ore and matte passing over this line on its way to the smelters and refineries was the largest since the location of these works at Anaconda.

The method of reduction at Anaconda embraces the crushing and sizing of the crude ore with water concentration, roasting concentrates, reduction of calcined concentrates and the better grade of crude ore in reverberatory furnaces to copper matte, converting of copper matte into "blister copper," smelting in shaft blast furnaces of converter lining with the higher grade and crude ores, poling or casting, refining of "blister copper," and refining of slimes of gold and silver from electrolytic vats. These several processes were described in the Montana report for 1897 in detail.

**Fergus County.**—The values won from ores mined in this county during 1899 were in the following amounts:

Description	Quantity.	Value.
Gold, fine ounces .....	8,883.774	\$183,643.91
Silver, fine ounces, (coinage value) .....	5,380.64	6,956.78
Total .....		\$190,600.69

Nearly the entire product of Fergus county came from the district about Maiden, where the Great Northern Mining and Developing Company treated the ore from Gilt Edge mine by the cyanide process, they having erected a plant for this purpose in 1898. Besides the values obtained by the above company, considerable amounts of gold were won by parties working on stray tailings from the former milling of ores from the Spotted Horse mine, a famous producer in former years. Another producer was the New Year mine.

**Flathead County.**—The metals from Flathead County in 1899 were as follows:

Description	Quantity.	Value.
Gold, fine ounces .....	802.264	\$16,584.27
Silver, fine ounces, (coinage value) .....	47,380.14	61,259.16
Lead, fine pounds, at \$4.47 per hundredweight .....	1,066,199	47,659.10
Total .....		\$125,502.53

Owing to the development work done at the mines in the county and to the abandonment of prospecting mills, and experimental concentrators, with a view to replacing them with larger and more economical plants, the production as shown above is a decrease in 1899 from what was taken out in 1898. Some properties were also in process of sale and transfer, during which time they were idle.

The development of this county was commenced shortly after the building of the coast extension of the Great Northern Railway a few years ago. This made possible the development of its mineral wealth. Unquestionably a wide field for mining is offered, and it is believed that production will increase as the properties already discovered are brought to proper development and equipment under the intelligent and successful management. The industry in 1899 seems to have been in that transitory stage which has characterized all section of the State, in some degree, following the first and attempted workings of mines after discovery and prior to larger and more profitable operation.

The recent opening for settlement of the ceded strip from the Blackfeet Indian reservation throws open additional territory in this county to the prospector. It is believed that many discoveries of mineral wealth will be made in addition to those already known. The topographical features of this newly opened region are extremely mountainous. The conditions seem excellent for successful prospecting.

**Granite County.**—The precious metals won by placer and quartz mining in 1899, were as follows:

Description	Quantity.	Value.
Gold, fine ounces .....	7,958.448	\$164,515.72
Silver, fine ounces, (coinage value) .....	1,989,213.53	2,571,912.44
Total .....		\$2,736,428.16

The above figures show the gain in 1899 to have been nearly 86 per cent over those of 1898 and a gain of nearly 255 per cent over those of 1897. The resumption of work in the mines and mills of the Granite and Bimetallic companies at Philipsburg has already been noted. These properties are distinctively silver producers, and the renewal of operations under a consolidated management in 1898 marked the revival of silver mining as an industry in Montana. The above figures show the degree of success that has attended the experiment and Montana, although yielding her former title of the "Silver State" to Colorado, points with pride to the work done at Philipsburg in 1899

under legislation and circumstances generally believed to have been adverse to the profitable operation of silver mines.

During 1899 the Denver and Montana Reduction Company erected a cyanide mill at Bearmouth to work such custom ores as might be offered for purchase as were suited to this process.

**Jefferson County.**—The following table shows the production from Jefferson county in 1899:

Description	Quantity.	Value.
Gold, fine ounces .....	7,415.708	\$153,296.29
Silver, fine ounces, (coinage value) .....	887,929.36	1,148,029.88
Copper, fine pounds, at \$16.67 per hundredweight .....	26,687	4,282.02
Lead, fine pounds, at \$4.47 per hundredweight .....	1,400,880	62,619.34
Total .....		1,368,227.53

These figures show a decrease from what had been the value of the production in 1898. The largest producing mine in the county in 1899 was the Elkhorn, a property that for many years has enjoyed this distinction, during which time it paid large dividends to its owners. The ore carried its chief value in silver contents, both lead and gold being associated with the silver, but in less important quantities. For several years the ore supply has been failing, and near the close of 1899 all that could be profitably extracted was exhausted, the pumps were drawn, and the mine finally abandoned to fill with water. To many this passing of this historic property from the list of Montana producers in the future, though inevitable and regretted, recalls its bonanza days, when large contributions were made to the mineral wealth credited to the state in the past.

The showing made by the leasers working on the Golden Sunlight group, near Whitehall, was creditable. The output from the Grey Eagle, at Wickes, a recently opened property, proves that it is likely to be an extensive producer, and in some measure make up for the decrease this county will hereafter suffer in its yield of metals because of the abandonment of the Elkhorn.

The Winscott mill, a property in the extreme northern part of the county, was in steady operation during the year and put forth a considerable product of gold bullion.

**Lewis and Clarke County.**—The production of metals by the mines of this county was increased in 1899 over that of the preceding year. Following are the figures for 1899:

Description	Quantity.	Value.
Gold, fine ounces .....	62,535.675	\$1,292,727.13
Silver, fine ounces, (coinage value) .....	203,251.90	262,790.33
Lead, fine pounds, at \$4.47 per hundredweight .....	500,000	22,350.00
Total .....		\$1,577,867.46

The output of gold by Lewis and Clarke county was the largest of any in the state during the year. The gain in the amounts of gold and silver



taken from ores mined in this county in 1899 was a considerable one, and largely arose because of the addition by the state legislature to the territory of this county of the portion that had been segregated from Deer Lodge county. This brought the Bald Butte mine and other properties into Lewis and Clarke county.

At Marysville the Montana Mining Company did not operate their two large stamp mills at full capacity one or the other having been closed down at various times, which were determined by the grade and character of the ore supply mined, the process being different in the separate mills to accumulate the varying nature of the mine product. The falling off thus occasioned was more than made up by this company at their cyanide mill, where the tailings



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impounded behind settling dams below the mills were treated. The amounts won were the largest since the working of the tailings was first attempted in 1897 and yielded a handsome profit to this company.

A combination stamp and cyanide mill was also in operation at the Belmont mine, near Marysville. After the usual milling by stamps and the gathering of values by amalgamation the tailings were subjected to an immediate leaching in the cyanide solution and a large portion of the remaining values extracted. The process resulted in the saving of a high percentage of the values and seems to have been most satisfactory.

At the Bald Mountain mine, also near Marysville, a 20-stamp mill, with pans and settlers for the additional treatment and amalgamation of the ore, was in operation during the entire year. The amount of the output from

this mill could not be included in the returns of Lewis and Clarke county, as the owner did not furnish a statement of their quantity and value, and it is not known that any of the produce was sold.

The Bald Butte mine, some 4 miles from Marysville, kept the 40-stamp mill belonging to that property working at full capacity in 1899. The output of metals by this property makes it second in importance in the county only to the yield by the Montana Mining Company, Limited.

A large tonnage of low-grade ore carrying iron in quantities desirable for fluxing purposes at the smelters, and having lead, silver and gold in small values contained in the ore, was taken from the War Eagle mine at Butler and shipped to the several reduction plants in the state. The mining of this product afforded employment to a considerable number of men during the year.

Other districts in Lewis and Clarke county yielding gold bullion from mills were those at Empire, Granite Butte, Gould, York and Unionville. Placer gold was taken from the gulches at Canyon Ferry, Helena, York and Butler. The Rimini mines continued shipments of concentrating ore and smelting ore in 1899.

The plant of the American Smelting and Refining Company at East Helena handled the largest tonnage in 1899 since its opening for the purchase and treatment of custom ores, this product coming principally from Montana and from the Coeur d'Alene district of Idaho. Power was furnished by electrical transmission from the dam across the Missouri river at Canyon Ferry. An addition to the works in 1900 is contemplated which will nearly double the present capacity of these works.

Near East Helena is also the Peck concentrator, a plant that has been erected for the concentration at small cost of custom ores of too low grade for smelting. These works were operated during the entire year.

**Madison County.**—Below is a table showing the output of precious metals in Madison county during 1899:

Description	Quantity.	Value.
Gold, fine ounces .....	23,708.977	\$490,108.05
Silver, fine ounces, (coinage value) .....	104,350.74	134,198.12
Copper, fine pounds, at \$16.67 per hundredweight .....	40,000	6,668.00
Lead, fine pounds, at \$4.47 per hundredweight .....	370,477	16,560.32
Total .....		\$648,254.49

This is a heavy decrease from the yield in 1898, the value of the product at that time having been largely over \$1,000,000. This was due to the culmination, in 1899, of several unfortunate features connected with mining in this county, some of which will be overcome in 1900. The working of large ore bodies recently opened in the county and the sale and equipment of properties promise that the output of metals will be heavily increased in the future and that this advantage will be a permanent one. Both placer and quartz mining are actively followed in Madison county. The principal center of the former is at or near Virginia City, along Alder gulch. This was discovered in 1863, and since that date more than \$90,000,000 in gold have been taken from the gravel of the gulch and bars. The leading feature of the operations

at this point in 1899 was the work done by dredging machines on the ground at or near the mouth of the gulch. The present plants were installed and first operated in 1899. The actual amount of gold recovered by them was less important than the actual experience had with the work to be done and the knowledge thus obtained and made available for future guidance.

Complete preparations have been made for carrying on continuous work in 1900, and the values then won and the profits realized will determine the success or failure of again working much of the ground in the gulch by these dredging plants. As the length of the gold-bearing gravel in the gulch is about 17 miles, the demonstration that this ground can be thus profitably worked will be most important. The aggregate amounts recovered in 1899 by the various companies, individuals and Chinamen, also working in this gulch, was a large one. Placer mining was also done in Norwegian, Bivens, Harris, Wisconsin, and other gulches in the South Boulder mountains. Although Madison county is a large territory, and its surface is broken by the Madison, Tobacco Root, Snow Crest and Ruby mountains in the southern portion, quartz mining is centered in the northern section of the county in the South Boulder and McCarty ranges of mountains. Pony, Richmond Flat, Norris, Red Bluff, Sand Creek, Gaylord, Sheridan, Twin Bridges, Leiverville and Virginia City are located in the South Boulder range, while Rochester and Silver Star are at the base of the eastern slope of the McCarty range.

The principal property working at Pony in 1899 was the Clipper group of mines, owned by Elling & Morris. It included a number of claims lying some 2 miles above the town, to which point the ore was hauled for milling at a 20-stamp mill belonging to the property. The ore is free milling, and the tailings susceptible of easy and cheap concentration. The mine has been well opened by tunnels, but a long one run on the Boss Tweed to cut the vein at a depth of about 1,200 feet was the feature of the development in 1899. Shortly after the close of the year this tunnel encountered the lead as anticipated, and the ore body from subsequent development promises to become one of the largest and most important discoveries ever made in Montana, and should make the output of precious metals from the Pony district in the future a heavy one.

The Garnet Gold Mining Company of St. Louis own a mine near Pony, on which a stamp mill was erected in 1898. The output of values from this property has since been greatly increased.

The Monitor and Revenue mines on Richmond Flat did not furnish the tonnage of ore that characterized their work in former years, and the loss in the total production to this county was considerable. The litigation threatened between these companies was avoided by the consolidation of the properties under a single ownership, and in the future it is probable that a return will be made to the heavier yield of ore formerly extracted. One of these properties is the Madisonian mine, whose sale to Chicago capitalists for a large sum is announced, after a thorough examination of the mine had been made, and a test of the ores by the cyanide plant erected for such a purpose. The ore bodies in this property are reported to be large, and the mill is to be erected sufficiently large to handle the ore from the property.



Norris and Red Bluff are the center of a region in which numerous discoveries have been made, and from which small shipments were taken in 1899. At Sand Creek prospecting was active and some ore was taken out. A small amount of bullion was made at the Chile mill from ores extracted at that mine.

In 1898 the May Flower group near Gaylord was the largest producing property in the county. The mine product is a high-grade ore, carrying the heaviest value in gold, and is sent for treatment to the smelter. Although the output from these mines was diminished in 1899, it was nevertheless the greatest value of any of the Madison county properties.

The fear entertained for some time that the mammoth smelter built by the



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Parrott Mining Company at Gaylord for treating the copper ores from the Butte mines would be indefinitely abandoned grew into a settled conviction in 1899. This plant was idle during the entire year. The Leiter mine at Leiterville was closed during the most of the year. From the vicinity of Sheridan some ore in small lots was taken out for shipment; the values of these have been inconsiderable. Some mining was done near Twin Bridges. The lead smelter at that point after having been remodeled, was put into commission, but the results were unsatisfactory and it has again been closed. Virginia City is in Alder gulch, and the center of the placer mining done in that section. The Kennett mine is also near this place, and after having recently been equipped with a new stamp mill was closed down and remained idle throughout the year.

**Meagher County.**—The values recovered from ores mined in this county during 1899 were contained in the product shipped from the mines at Castle and vicinity. These values are as follows:

Description	Quantity.	Value.
Gold, fine ounces .....	242.857	\$5,020.30
Silver, fine ounces, (coinage value) .....	150,020.86	193,966.36
Lead, fine pounds, at \$4.47 per hundredweight .....	3,000.000	223,500.00
Total .....		\$422,486.66

**Missoula County.**—The precious metals won in this county during 1899 came from placer mines. Their value was as follows:

Description	Quantity.	Value.
Gold, fine ounces .....	2,749.898	\$56,845.44
Silver, fine ounces, (coinage value) .....	100.96	130.53
Total .....		\$56,975.97

**Park County.**—The returns from the production of gold and silver by the mines in this county in 1899 were as follows:

Description	Quantity.	Value.
Gold, fine ounces .....	5,883.176	\$121,616.04
Silver, fine ounces, (coinage value) .....	458.72	593.09
Total .....		\$122,209.13

Nearly all of the above came from the vicinity of Gardner, the region tributary to the Boulder river and the placers near Emigrant Peak.

In the vicinity of Gardner the leading operations were those at Bear gulch and Crevasse mountain. At the former place the Bear Gulch Mining Company was engaged in preparing their property for a large future production by the development of the mine, the completion of a mill, and the erection of suitable quarters for employees. Since the commencement of milling operations their output of gold has been considerable. Other companies have acquired property in this camp, and some gold came from their operations in 1899. The activity at this place has restored Park county to the list of producing counties in Montana, it having at one time previously yielded considerable gold. For some years last past the output has been small.

The mines in the Boulder district did not produce largely in 1899, while the yield from the neighborhood of Emigrant Peak was a considerable quantity of placer gold.

**Silver Bow County.**—For many years the output of precious metals of this county has been the largest in the state. The quantities and values in 1899, were as follows:

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Description	Quantity.	Value.
Gold, fine ounces .....	62,038.377	\$1,282,447.08
Silver, fine ounces, (coinage value) .....	9,855,831.97	12,742,893.88
Copper, fine pounds, at \$16.67 per hundred weight ..	245,245,908	40,882,392.86
Total .....		\$54,907,833.82

The production of the Butte mines dates from 1882. The following table shows the output to have been more than \$475,000,000 during the past eighteen years:

Year.	Gold.	Silver.	Copper.
	Fine ounces.	Fine ounces.	Fine lbs.
1882 .....	12,093.750	2,699,296.38	9,058,284
1883 .....	14,560.875	3,480,468.75	24,664,346
1884 .....	21,776.006	4,481,180.36	43,093,054
1885 .....	13,838.297	4,126,617.60	67,797,864
1886 .....	31,223.450	5,924,180.38	57,611,485
1887 .....	48,175.743	6,958,822.92	78,700,000
1888 .....	44,320.062	8,275,768.87	98,504,000
1889 .....	31,652.325	6,560,038.75	104,589,000
1890 .....	25,704.730	7,500,000.00	112,700,000
1891 .....	29,395.356	7,985,089.77	112,383,420
1892 .....	36,222.560	8,311,130.82	168,413,284
1893 .....	33,807.877	6,668,730.16	159,875,499
1894 .....	36,768.015	7,561,124.46	185,194,385
1895 .....	41,473.363	10,051,760.52	197,190,659
1896 .....	59,815.755	11,120,731.78	228,886,962
1897 .....	54,198.037	10,710,815.45	236,826,597
1898 .....	55,343.589	8,996,555.01	216,648,077
1899 .....	62,038.377	9,855,831.97	245,245,908
Total .....	652,368.167	131,268,203.95	2,337,382,824

Figuring the gold and silver at their coinage values, and copper at 12½ cents per pound, which is believed to be a fair average price for copper during the above period, the value of the total output of these three metals in Silver Bow county has been:

Gold .....	\$13,485,644.80
Silver .....	169,720,505.11
Copper .....	292,172,583.20

Total.....\$475,379,003.91

These enormous values have practically originated at Butte, the greater portion of the production having been restricted to a small area, not exceeding 2 square miles in extent. The mines are in the Granite mountain, just above the city, and have made Butte the most busy and prosperous place of equal population in the world. Its commercial importance, as the outgrowth of its mining activity, was such that ten years ago the three greatest trans-continental railway systems of the United States were attracted to its gates, and sought to share in the great traffic here centered.

Butte was first settled in 1864. This was due to the discovery of placer gold in Missoula gulch, now a part of the city. The output and importance of these placers was duplicated elsewhere in neighboring camps of the state, now forgotten, where the ground was richer and conditions more favorable.



If the local history of Butte had been uneventful prior to the exhaustion of its gold-bearing gravel, the discovery and working of the silver-bearing ledges on the hill afterwards brought little or no increased importance to the camp. The most interesting fact of this second period was the one that brought the camp into its present prominence. The Anaconda mine, and others of the great properties of to-day, as well, were brought, developed, and worked in the fullest confidence that the contained silver values constituted their greatest worth. There was nothing to indicate, and no imagination so wild as to guess that at a comparatively slight depth the greatest deposits of copper yet known to the world were to be found.

The year 1882 marks the discovery and opening of the Anaconda as the first copper mine at Butte. At that time the dark red and brown quartz, then being developed for its gold and silver, carried only traces of native copper or very limited appearances of the oxide. While preparing to mill this ore the main shaft on the Anaconda was driven downward until it suddenly entered the rich copper ledge, now famous throughout the world, at a depth of about 300 feet. This led to other and similar discoveries in the camp immediately.

Previous to 1882 an average of 80 per cent of all the copper produced in the United States came from the mines bordering Lake Superior. In the following year, 1883, the Lake Superior region produced 51.6 per cent, Arizona 27 per cent, and Butte 21.4 per cent of the domestic copper. The percentage of the Butte output continued to increase steadily, and in 1887 it became greater than the yield from the Lake Superior mines. This lead has ever since been advanced until 1898, when 60 per cent of all the world's copper was supplied by the United States, Butte furnishing 41 per cent, Lake Superior 30 per cent, and Arizona 21 per cent of all the domestic production. Thus Butte furnishes a quarter of the copper product of the world, nearly one-half of which is the output of a single company, the Anaconda.

Most of the mines that at present furnish the principal wealth of this district are situated at the head of Dublin Gulch. The mountain spur lying between this gulch and Silver Bow Valley is called Anaconda Hill, from the mine of that name. The region is characterized by gently rounded topographical forms and a general barrenness of aspect. This latter is due largely to the cutting of timber for mine use following the first workings, and to the sulphur-laden fumes from the smelting works since preventing a renewal of vegetation. The principal mines of the Anaconda company lie east of Main street and south of the portion of Butte known as Centerville. Approximately they form a horseshoe, with the open heel toward Main street, or to the west. On the north arm of this, and lying along the Syndicate lode, are the Mountain Consolidated, Green Mountain, Diamond and Wake-Up-Jim mines. The Bell, High Ore and Modoc are on the Bell-Modoc lode or system of veins and form the curve at the toe of the shoe to connect the two arms. On the south arm is the famous Anaconda lode, lying along which are the St. Lawrence, Never Sweat and Anaconda mines.

Besides these claims are many others at Butte owned by the Anaconda Company, some of which, in point of production, rank closely with those already named, while others are but partially developed and worked as yet. The

ground of the Boston and Montana Consolidated Copper and Silver Mining Company is east of and along the continuation of the Anaconda lode. Besides the Mountain View and other mines on the Anaconda lode, this company owns a number of claims in the same vicinity. From these properties is taken the great tonnage of ore that goes for treatment to the Great Falls plant, belonging to this company. The ground of the Montana Ore Purchasing Company adjoins that of the Anaconda and Boston and Montana companies. From the mine of this company is taken the ore that supplies their smelter at Meaderville. Immediately south of the Anaconda lode, and parallel with it, are the Parrot, Colusa Parrot, and other mines, while to the southwest of the syndicate lode is the Gagnon.



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There are many claims at Butte besides the properties already enumerated; of all, however, the Anaconda lode is the greatest and most important ore producer. It has been opened and traced for a distance of more than a mile. In the ground of the Anaconda company the lode consists of one broad ledge of ore with smaller and parallel veins that joint the main ledge. The strike is from a few degrees north to almost a 15 degrees south of east. The dip in the Anaconda mine is almost vertical for 400 feet, when it changes and varies from 60 degrees to 70 degrees south. The width is not uniform. The Never Sweat mine is at the west end of the lode; it consists of a number of parallel veins, rarely exceeding 15 feet in width, with spurs about 5 feet wide. In the Anaconda mine the main vein is from 25 feet to 40 feet in width, decreasing to 5 feet as it travels eastward through the St. Lawrence into the



Mountain View mine, although in places on the 1,300-foot level of the St. Lawrence it is 50 feet wide.

The syndicate lode has been opened continuously by underground workings for a distance of 5,500 feet. The general direction of the strike is from north 65 degrees east to south 80 degrees east. The dip averages 65 degrees south. This lode is notable because of its wide ore-bearing zone, which is often from 40 feet to 100 feet wide, both near the surface and in depth, although at intermediate points it may decrease to 5 feet. The syndicate lode has forks and spurs along it, so that the vein is sometimes double and sometimes divided into parallel veins.

The veins in the Bell-Modoc system, Ground Squirrel, Ramsdell-Parrot, and others of the Butte mines, though varying in details, have many of the general features of the Anaconda and syndicate lodes.

The scene on the Anaconda Hill is ever a busy one. Both surface and underground workings at all the properties are most comprehensive. Centered about the shafts are mammoth structures for housing the gigantic hoisting engines, air compressors and steam generating plants. Near by are the carpenter and machine shops, where the mining timbers are framed and the machinery repaired or rebuilt. Electric generating stations, ore bins, waste dumps, and railroads are also much in evidence. The great warehouses and yards are filled with immense quantities of mine supplies of every description, whose value reaches into the hundreds of thousands of dollars. At the Anaconda properties in 1898 the machinery for new installations and replacements of old cost \$461,612; timbers, \$429,886; the candles, \$41,761; fuel \$207,861; labor, \$3,376,502; oil, \$16,976; powder, \$147,296; tools \$37,427; fuse and caps, \$27,004.

The High Ore mine has the finest general equipment of any on the copper hill. The boiler power is furnished by two sets of boilers, known as the old and new plant. The old plant consists of seven sets, fourteen boilers in all. Of these, twelve are of 80 horse-power each, and two are of 60 horse-power each. The new plant has six boilers of the Scotch marine type, each of 140 horse-power, making an aggregate of 1,920 horse-power at the High Ore plant as against 1,750 at the Never Sweat, the next in power. Both the old and new boiler plants are connected by a brick flue 100 feet long, 8 feet high, and 6 feet wide, with a new steel stack 150 feet high and 8 feet 9 inches in diameter, weighing 64,000 pounds.

The hoisting engine at the High Ore, though ample for all requirements, is not equal to those at the Never Sweat and Mountain Consolidated mines, but identical with the ones in use at the Anaconda and St. Lawrence. It is a double Poppett valve engine of 25-horse-power capacity, with cylinders 30 inches by 72 inches. The flat woven-wire steel cables from the winding drums pass over the sheaves of a steel gallows frame 100 feet above the surface, to raise and lower the cages used in the hoisting of ores from the various levels.

The following statistical tables of Montana production showing the quantity and values of the various metals, their origin by counties, and from the several classes of ores, together with the final disposition of the ores and bullion as to sale and treatment, have been assembled from confidential returns



furnished by the producers. These totals have been verified by comparison with those made from figures and data given by the United States mint and assay offices and the smelters and refineries that handled the Montana product.

DEPOSITS AT THE UNITED STATES ASSAY OFFICE, HELENA, MONTANA,  
DURING THE CALENDAR YEAR 1899.

County	Gold		Silver		Total value
	Standard ounces	Value	Standard ounces	Com- mercial value	
Beaverhead .....	1,087.392	\$20,230.51	68.60	\$34.52	\$20,265.03
Broadwater .....	3,779.406	70,314.47	399.01	204.43	70,518.90
Cascade .....	10.596	197.13	3.41	1.71	198.84
Choteau .....	15.053	280.06	.67	.34	280.40
Deer Lodge .....	8,610.137	160,188.49	1,325.97	671.22	160,859.71
Fergus .....	65.882	1,225.70	10.71	5.52	1,231.22
Flathead .....	245.035	4,558.77	40.51	21.36	4,580.13
Granite .....	2,554.676	47,528.79	570.96	289.20	47,817.99
Jefferson .....	2,735.575	50,894.35	437.12	224.29	51,118.64
Lewis and Clarke .....	31,996.177	595,277.54	16,109.70	8,182.55	603,460.09
Madison .....	8,862.409	164,695.89	2,203.97	1,134.62	165,830.51
Meagher .....	158.730	2,953.13	12.07	6.25	2,959.38
Missoula .....	3,055.442	56,845.39	112.18	58.84	56,904.23
Park .....	3,104.988	57,767.18	465.67	241.69	58,008.87
Ravalli .....	690.839	12,852.79	47.30	24.65	12,877.44
Silver Bow .....	2,067.588	38,466.69	501.81	258.58	38,725.27
Total Montana .....	69,029.925	1,284,276.88	22,309.66	11,359.77	1,295,636.65
Idaho .....	14,295.155	265,956.22	2,409.07	1,232.78	267,189.00
Oregon .....	411.616	7,057.97	91.71	45.89	7,103.86
Washington .....	508.393	9,458.46	124.48	63.89	9,522.35
Alaska .....	97.815	1,819.81	9.74	5.16	1,824.97
Northwest Territory .....	3,599.154	66,960.99	961.81	483.43	67,444.42
British Columbia .....	10,734.810	199,717.35	5,353.12	2,751.03	202,468.38
Ontario .....	106.174	1,975.33	13.07	6.54	1,981.87
Jewelry .....	66.899	1,244.63	15.09	7.56	1,252.19
Total .....	29,820.016	554,790.76	8,978.09	4,596.28	559,387.04
Grand Total .....	98,849.941	1,839,067.64	31,287.75	15,956.05	1,855,023.69

PRODUCTION OF GOLD AND SILVER IN MONTANA DURING THE CALENDAR YEAR 1899.

Summary by counties	Gold		Silver		Total value
	Fine ounces	Value	Fine ounces	Coinage Value	
Beaverhead .....	7,822.485	161,705.11	253,262.01	\$327,449.87	\$489,154.98
Broadwater .....	8,262.627	170,803.66	144,948.35	187,407.96	358,211.62
Cascade .....	2,128.526	44,000.54	912,723.21	1,180,086.57	1,224,087.11
Choteau .....	13.548	280.06	.60	.78	280.84
Deer Lodge .....	10,349.123	213,935.36	4,493.37	5,809.60	219,744.96
Fergus .....	8,883.774	183,643.91	5,380.64	6,966.78	190,600.69
Flathead .....	802.264	16,584.27	47,380.14	61,259.16	77,843.43
Granite .....	7,958.448	164,515.72	1,989,213.53	2,571,912.44	2,736,428.16
Jefferson .....	7,415.706	153,296.29	887,929.36	1,148,029.88	1,301,326.17
Lewis and Clarke .....	62,535.675	1,292,727.13	208,251.90	262,790.33	1,555,517.46
Madison .....	23,708.977	490,108.05	104,350.74	134,918.12	625,026.17
Meagher .....	242.857	5,020.30	150,020.86	193,966.36	198,986.66
Missoula .....	2,749.898	56,845.44	100.96	130.53	56,975.97
Park .....	5,883.176	121,616.04	458.72	593.09	122,209.13
Ravalli .....	841.755	17,400.62	95.67	123.69	17,524.31
Silver Bow .....	62,038.377	1,282,447.08	9,855,831.97	12,742,893.88	14,025,340.96
Returns from custom smelters, mints, and assay offices impossible to classify by counties .....	21,489.499	444,227.37	2,291,312.82	2,962,505.48	3,406,732.85
Total .....	233,126.717	4,819,156.95	16,850,754.85	21,786,834.52	26,605,991.47

**BULLION OF MONTANA PRODUCTION DEPOSITED AT THE UNITED STATES ASSAY OFFICE, HELENA MONTANA, DURING THE CALENDAR YEAR 1899.**

Origin	Gold		Silver		Total value
	Standard ounces	Value	Standard ounces	Com-mercial Value	
Placer gold .....	21,921.835	\$407,847.62	3,143.57	\$1,614.10	\$409,461.72
Mill bullion .....	47,108.090	876,429.26	19,166.09	9,745.67	886,174.93
Total .....	69,029.925	1,284,276.88	22,309.66	11,359.77	1,295,636.65

**BULLION OF MONTANA PRODUCTION DEPOSITED AT THE UNITED STATES MINTS AND ASSAY OFFICES DURING THE CALENDAR YEAR 1899.**

Institution	Gold		Silver		Total value
	Standard ounces	Value	Standard ounces	Coining value	
Mints.					
Denver .. . . .	246.076	\$4,578.16	24.34	\$28.32	\$4,606.48
Philadelphia .. . . .	1,932.765	35,958.42	3,865.78	4,498.35	40,456.77
San Francisco .. . . .	26.186	487.18	3.42	3.98	491.16
Assay Offices.					
Boise .. . . .	6,294.404	117,105.19	448.68	522.10	117,627.29
Helena .. . . .	69,029.925	1,284,276.88	22,309.66	25,960.33	1,310,237.21
New York .. . . .	65,427.471	1,217,255.27	859,970.75	1,000,693.22	2,217,948.49
Total .. . . .	142,956.827	2,659,661.10	886,622.63	1,031,706.30	3,691,367.40

**PRODUCTION OF GOLD AND SILVER IN MONTANA (ORIGIN DETAILED) DURING THE CALENDAR YEAR 1899.**

Origin	Gold		Silver		Total value
	Fine ounces	Value	Fine ounces	Coining value	
Placer bullion .....	28,827.617	\$595,919.73	3,592.78	\$4,645.20	\$600,564.93
Mill bullion .....	64,070.159	1,324,447.73	2,690,892.07	3,479,133.17	4,803,580.90
Cyanide mill bullion .....	38,247.583	790,647.71	97,684.83	126,299.58	916,947.29
In copper ores .....	55,706.317	1,151,551.77	9,890,572.37	12,787,810.73	13,939,362.50
In lead ores .....	7,815.539	161,561.53	2,504,695.24	3,238,393.85	3,399,955.38
In dry ores and concentrates, classed as smelting ores....	38,459.502	795,028.48	1,663,317.56	2,150,551.99	2,945,580.47
Total .....	233,126.717	4,819,156.95	16,850,754.85	21,786,834.52	26,605,991.47

**ORIGIN BY PERCENTAGES OF THE PRODUCTION OF GOLD AND SILVER IN MONTANA DURING THE CALENDAR YEAR 1899.**

Origin	Percentage gold	Percentage silver
Placer bullion .....	12.37	0.03
Mill bullion .....	27.50	15.92
Cyanide mill bullion .....	16.37	.60
Copper ores .....	23.90	58.70
Lead ores .....	3.36	14.87
Dry ores .....	16.50	9.88
Total .....	100.00	100.00

## SEVENTH ANNUAL REPORT OF BUREAU

## PRODUCTION OF COPPER AND LEAD IN MONTANA DURING THE CALENDAR YEAR 1899.

Summary by Counties.	Copper.	Lead.
	Finelbs.	Finelbs.
Beaverhead .....	165,719	1,038,894
Broadwater .....		1,088,036
Cascade .....		3,810,679
Deer Lodge .....	50,000	
Flathead .....		1,066,199
Granite .....	75,000	
Jefferson .....	25,687	1,400,880
Madison .....	40,000	370,477
Meagher .....		5,000,000
Missoula .....		250,000
Ravalli .....		150,000
Silver Bow.. .....	245,245,908	20,000
Custom smelters in addition to the above, not possible to distribute to counties.....		6,149,585
Total production.....	245,602,314	20,344,750

## DISPOSITION OF GOLD AND SILVER OF MONTANA PRODUCTION DURING THE CALENDAR YEAR 1899.

Disposition	Gold		Silver		Total value
	Fine ounces	Value	Fine ounces	Coining value	
Deposited at the United States mints and assay offices.....	128,661.144	2,659,661.10	797,960.37	\$1,031,706.30	\$3,691,367.40
Shipped to custom smelters and refineries by producers.	104,465.573	2,159,495.85	16,052,794.48	20,755,128.22	22,914,624.07
Total .....	233,126.717	4,819,156.95	16,850,754.85	21,786,834.52	26,605,991.47

## TOTAL PRODUCTION OF PRECIOUS METALS IN MONTANA DURING THE CALENDAR YEAR 1899.

Description.	Quantity.	Value.
Gold, fine ounces .....	233,126.717	\$4,819,156.95
Silver, fine ounces, (coinage value) .....	16,850,754.85	21,786,834.52
Copper, fine pounds, at \$16.67 per hundredweight.. ..	245,602,314	40,941,905.74
Lead, fine pounds, at \$4.47 per hundredweight.. ..	20,344,750	909,410.33
Total .....		\$68,457,307.54



PRODUCTION OF GOLD, SILVER, COPPER AND LEAD IN THE STATE OF  
MONTANA FROM THE YEAR 1862 TO 1899, INCLUSIVE.

Year.	Gold.	Silver.*	Copper.	Lead.	Totals.	Increase Per cent.
1862 to 1881, inclusive..	\$200,000,000	\$11,000,000	.....	.....	\$211,000,000	.....
1882 ....	2,550,000	4,370,000	\$1,539,860	.....	8,459,860	.....
1883 ....	1,800,000	6,000,000	3,452,960	\$226,424	11,479,384	37½
1884 ....	2,170,000	7,000,000	5,386,500	246,326	14,802,826	31
1885 ....	3,400,000	11,500,000	6,779,800	274,350	21,954,150	50
1886 ....	4,422,000	13,849,000	5,761,200	494,132	24,526,332	12
1887 ....	5,978,536	17,817,548	8,853,750	607,662	33,257,496	35½
1888 ....	4,200,253	15,790,736	15,103,946	569,160	35,664,095	7½
1889 ....	3,500,000	19,393,939	13,334,970	436,975	36,685,884	3
1890 ....	3,300,000	20,363,636	16,656,437	675,392	40,995,465	11½
1891 ....	2,890,000	20,139,394	14,377,336	1,229,027	38,635,757	*** 5½
1892 ....	2,891,386	22,432,323	19,105,464	990,035	45,419,208	18
1893 ....	3,576,000	21,858,780	16,630,958	964,089	43,029,827	*** 5
1894 ....	3,651,410	16,575,458	17,233,718	730,561	38,191,137	*** 11
1895 ....	4,327,040	22,886,992	21,114,869	754,360	49,083,261	28½
1896 ....	4,380,671	20,324,877	25,356,541	670,010	50,732,099	3½
1897 ....	4,496,431	21,730,710	26,798,915	928,619	53,954,675	6
1898 ....	5,247,913	19,159,482	26,102,616	809,056	51,319,067	*** 5
1899 ....	4,819,157	21,786,835	40,941,906	909,410	68,457,308	33
Total ....	\$267,600,797	\$313,979,710	284,531,746	11,535,578	877,647,831	

\* Coining rate.

\*\* No annual compilations were made prior to 1881.

\*\*\* Decrease.

THE MINERAL PRODUCTION OF 1900.

The estimate of the mineral output of the state for 1900 is \$68,723,160, being an increase over 1899 of \$278,753. Copper shows an increase of 10 million pounds and gold of \$141,000. The total products for 1900 are as follows:

Copper pounds.....	255,000,000	\$41,246,250
Silver ounces.....	16,750,000	21,607,500
Gold, ounces.....	248,000	4,960,000
Lead, pounds.....	20,000,000	909,410
Total .....		\$68,723,160

Mr. Braden gives the following as the production of metals for 1898, the previous year:

PRODUCTION OF GOLD AND SILVER IN MONTANA DURING THE CALENDAR YEAR 1898.

Summary by Counties	Gold		Silver		Total value
	Fine ounces	Value	Fine ounces	Coining value	
Beaverhead .....	9,591.674	\$189,277.50	368,263.92	\$476,139.21	\$674,416.71
Broadwater .....	10,552.021	218,129.63	234,168.06	367,409.21	585,538.84
Carbon .....	52.940	1,094.37	3.45	4.46	1,096.83
Cascade .....	1,008.563	20,848.85	430,397.96	556,474.13	577,322.98
Custer .....	62.206	1,285.91	10.33	13.36	1,299.27
Deer Lodge .....	23,504.896	485,889.33	10,732.13	13,875.88	499,765.21
Fergus .....	6,201.608	128,198.61	271.35	350.86	128,549.45
Flathead .....	1,522.716	31,477.33	75,239.89	97,279.86	128,757.19
Granite .....	8,514.411	176,008.50	1,003,416.91	1,297,347.11	1,473,355.61
Jefferson .....	10,943.572	226,223.71	1,036,889.28	1,340,624.52	1,566,848.23
Lewis and Clarke .....	43,899.555	907,484.34	166,956.31	215,862.70	1,123,347.04
Madison .....	47,240.616	976,550.20	111,294.95	143,896.50	1,120,446.70
Meagher .....	153.804	3,179.41	160,012.19	206,884.45	210,063.86
Missoula .....	3,066.274	63,385.51	3,122.34	4,036.96	67,422.47
Park .....	641.618	13,263.42	103.55	133.88	13,397.30
Ravalli .....	60.836	1,257.59	4.81	6.22	1,263.81
Silver Bow .....	55,343.589	1,144,053.52	8,996,555.01	11,631,909.51	12,775,963.03
Teton .....	35.463	733.09	2.53	3.30	736.39
Returns from custom smelters, mints and assay offices, impossible to classify by counties .....	31,471.425	650,572.09	2,171,216.99	2,807,230.07	3,457,802.16
Total .....	253,867.787	5,247,912.91	14,818,661.98	19,159,482.17	24,407,395.08

## SEVENTH ANNUAL REPORT OF BUREAU

PRODUCTION OF GOLD AND SILVER IN MONTANA (ORIGIN DETAILED)  
DURING THE CALENDAR YEAR 1898.

Origin	Gold		Silver		Total
	Fine ounces	Value	Fine	Coining	
Placer bullion .....	31,662.452	\$654,520.97	4,621.33	\$5,199.24	\$659,710.21
Mill bullion .....	80,590.915	1,665,963.10	1,028,619.10	1,329,931.77	2,995,894.87
Cyanide mill bullion .....	19,235.180	397,626.46	78,006.95	100,357.47	498,493.93
In copper ores .....	51,408.020	1,062,698.09	9,495,911.71	12,277,542.46	13,340,240.55
In lead ores .....	8,369.027	173,003.14	2,763,991.44	3,573,645.50	3,746,648.64
In dry ores and concentrates classified as smelting ores ..	62,602.143	1,294,101.15	1,448,111.45	1,872,305.73	3,166,406.88
Total .....	253,867.787	5,247,912.91	14,818,661.98	19,159,482.17	24,407,395.08

ORIGIN BY PERCENTAGES OF THE PRODUCTION OF GOLD AND SILVER  
IN MONTANA DURING THE CALENDAR YEAR 1898.

Origin.	Percentage Gold	Percentage Silver
Placer bullion.. .....	12.60	.03
Mill bullion .....	31.90	6.93
Cyanide mill bullion .....	7.60	.52
Copper ores .....	20.35	64.13
Lead ores .....	3.35	18.66
Dry ores .....	24.20	9.73*
Total .....	100.00	100.00

PRODUCTION OF COPPER AND LEAD IN MONTANA DURING THE CALENDAR YEAR 1898.

Summary by Counties.	Copper. (Fine Lbs.)	Lead. (Fine Lbs.)
Beaverhead .....	121,039	1,582,450
Broadwater .....	.....	1,600,000
Cascade .....	.....	3,729,168
Flathead .....	116,604	.....
Deer Lodge .....	.....	1,000,000
Granite .....	55,000	.....
Jefferson.....	17,964	1,340,715
Madison .....	20,630	270,477
Meagher .....	.....	6,000,000
Missoula .....	.....	122,681
Silver Bow .....	216,648,077	.....
Custom smelters in addition to the above, not possible to distribute to counties .....	.....	5,758,211
Total production .....	216,979,354	21,403,592

TOTAL PRODUCTION OF PRECIOUS METALS IN MONTANA DURING THE  
CALENDAR YEAR 1898.

Description.	Quantity.	Value.
Gold, fine ounces .....	253,867.787	\$5,247,912.91
Silver, fine ounces, (coinage value) .....	14,818,661.98	19,159,482.17
Copper, fine ounces, at \$12.03 per cwt.....	216,979,354	26,102,616.29
Lead, fine pounds, at \$3.78 per cwt .....	21,403,592	809,055.78
Total value of production .....	.....	\$51,319,067.15





## SEVENTH ANNUAL REPORT OF BUREAU

PRODUCTION OF GOLD AND SILVER IN MONTANA (ORIGIN DETAILED)  
DURING THE CALENDAR YEAR 1898.

Origin	Gold		Silver		Total
	Fine ounces	Value	Fine	Coining	
Placer bullion .....	31,662.452	\$654,520.97	4,621.33	\$5,199.24	\$659,710.21
Mill bullion .....	80,590.935	1,665,963.10	1,028,619.10	1,329,931.77	2,995,894.87
Cyanide mill bullion .....	19,235.180	397,626.46	78,006.95	100,357.47	498,493.93
In copper ores .....	51,408.020	1,062,698.09	9,495,911.71	12,277,542.46	13,340,240.55
In lead ores .....	8,369.027	173,003.14	2,763,991.44	3,573,645.50	3,746,648.64
In dry ores and concentrates classed as smelting ores ..	62,602.143	1,294,101.15	1,448,111.45	1,872,305.73	3,166,406.88
Total .....	253,867.787	5,247,912.91	14,818,661.98	19,159,482.17	24,407,395.08

ORIGIN BY PERCENTAGES OF THE PRODUCTION OF GOLD AND SILVER  
IN MONTANA DURING THE CALENDAR YEAR 1898.

Origin.	Percentage Gold	Percentage Silver
Placer bullion.. .....	12.60	.03
Mill bullion .....	31.90	6.93
Cyanide mill bullion .....	7.60	.52
Copper ores .....	20.35	64.13
Lead ores .....	3.35	18.66
Dry ores .....	24.20	9.73*
Total .....	100.00	100.00

PRODUCTION OF COPPER AND LEAD IN MONTANA DURING THE CALENDAR YEAR 1898.

Summary by Counties.	Copper. (Fine Lbs.)	Lead. (Fine Lbs.)
Beaverhead .....	121,039	1,582,450
Broadwater .....	.....	1,600,000
Cascade .....	.....	3,729,168
Flathead .....	116,604	.....
Deer Lodge .....	.....	1,000,000
Granite .....	55,000	.....
Jefferson .....	17,954	1,340,715
Madison .....	20,680	270,477
Meagher .....	.....	6,000,000
Missoula .....	.....	122,681
Silver Bow .....	216,648,077	.....
Custom smelters in addition to the above, not possible to distribute to counties .....	.....	5,758,211
Total production .....	216,979,354	21,403,592

TOTAL PRODUCTION OF PRECIOUS METALS IN MONTANA DURING THE  
CALENDAR YEAR 1898.

Description.	Quantity.	Value.
Gold, fine ounces .....	253,867.787	\$5,247,912.91
Silver, fine ounces, (coinage value) .....	14,818,661.98	19,159,482.17
Copper, fine ounces, at \$12.03 per cwt. ....	216,979,354	26,102,616.29
Lead, fine pounds, at \$3.78 per cwt .....	21,403,592	809,055.78
Total value of production .....	.....	\$51,319,067.15





CITY HALL - BUTTE.



### The Expenditures of Operation.

The following figures giving in detail the expenditures of operating mines on an extensive scale, will be of interest to those who desire to inform themselves in this line, and will also give a clearer idea of the mining operations in Montana.

	Syndicate Group	Anaconda Group	Total	Per Ton (Cents)
Assay expenses and salaries .....	\$4,881	\$4,435	\$9,316	0.6
Candles .....	23,681	18,080	41,761	2.9
Electric light .....	8,321	6,595	14,916	1.0
Coal .....	117,501	90,360	207,861	14.2
Expenses .....	10,934	9,255	20,189	1.4
Freight on ore .....	255,946	196,135	452,081	31.0
Fuse and caps .....	16,942	10,062	27,004	1.8
Labor .....	1,825,931	1,550,571	3,376,502	231.4
Legal expenses .....	7,309	18,991	26,300	1.8
Mess expenses .....	1,687	2,436	4,123	0.3
Oil .....	9,938	7,041	16,979	1.2
Personal injuries .....	18,856	17,558	36,414	2.5
Powder .....	91,359	55,937	147,296	10.1
Precipitating expenses .....		6,110	6,110	0.4
Precipitating labor .....		19,012	19,012	1.3
Precipitating scrap material .....		9,020	9,020	0.6
Salaries, including management .....	54,108	42,172	96,280	6.6
Stable expenses .....	2,857	3,165	6,022	0.4
Sundry supplies .....	25,560	20,674	46,234	3.2
Taxes .....	35,490	39,490	70,980	4.9
Timber .....	248,133	181,754	429,886	29.5
Tools and utensils .....	20,503	16,924	37,427	2.6
Water .....	11,265	11,055	22,320	1.5
Repairs—				
Building and structures .....	873	1,973	2,846	0.2
Machinery and plant .....	177,499	203,032	308,531	26.1
Construction—				
Building and structures .....	34,070	51,220	85,290	5.8
Machinery and plant .....	55,567	97,513	153,081	10.5
Deduct one-half of profits of subsidiary departments .....	\$3,059,213	\$2,686,571	\$5,745,784	393.8
<b>Total .....</b>			<b>\$241,861</b>	<b>16.6</b>
<b>Net cost .....</b>			<b>\$5,503,923</b>	<b>377.2</b>

The average cost for mining per ton of ore was, therefore, \$3.94 actual cost, or \$3.77 net cost, after deducting profits of subsidiary departments.

The following table shows the details of expenditure at the reduction works for the year:

	Amount.	Per Ton (Cts.)
Custom ores .....	\$164,398.29	11.3
Concentrating .....	1,124,508.96	77.0
Smelting .....	2,810,268.98	192.6
Converting and casting .....	1,073,938.86	73.6
Blast furnace .....	390,105.96	26.4
Refining .....	603,123.77	41.4
Reduction of silver mud (slime from electrolytic plant) .....	73,467.10	5.0
Melting (construction) .....	10,125.76	0.7
<b>Totals .....</b>	<b>\$6,249,938.67</b>	<b>428.3</b>
Deduct one-half of profits of subsidiary department .....	241,861.62	16.6
<b>Net cost .....</b>	<b>\$6,008,007.05</b>	<b>411.7</b>

The cost of treatment was \$4.23 per ton actual cost, or \$4.12 per ton net cost, after deducting profits of subsidiary departments.

The net cost of mining and treatment was, therefore, \$7.89 per ton of ore. The average yield was \$11.22 per ton, showing a profit of \$3.33 per ton.

The income account, condensed, is as follows:

Sales of product .....		\$18,254,849
Profits of subsidiary department .....		483,723
Royalties, rents and dividends received .....		79,285
Total .....		\$18,817,857
Mining expenses .....	\$5,745,784	
Reduction works .....	6,249,939	
Freights, railroads and ocean .....	606,298	
Refining charges at seaboard .....	968,891	
Interest on advance .....	34,900	
General expenses, New York .....	102,638	
Decrease in metals on hand .....	1,468,161	
		\$15,266,611
Balance profit for the year .....		3,551,346
Dividends paid, 10 per cent on stock .....		3,000,000
Surplus for the year .....		551,346
Add surplus July 1, 1897 .....		5,644,563
Balance June 30, 1898 .....		\$6,195,909

The items of sales of products were: Copper, \$14,605,589; silver, \$3,237,278; gold, \$411,985; totals, \$18,254,849. The value of metals on hand and in course of treatment on June 30, 1897, was \$5,521,031; on June 30, 1898, it was \$4,052,870; a decrease of \$1,468,161, as above. The total quantity of ore treated since the first opening of the mines in 1880 has been 9,614,263 tons. The total product has been 550,962 short tons copper, 40,658,103 ounces silver and 135,244 ounces gold. The coining value of these amounts of gold and silver are \$2,795,741.60 and \$52,568,052.36 respectively. The value of the copper at the average price of \$12.50 per hundred weight is \$137,740,500. The total value of the yield from the mines of this company to date has therefore been \$193,104,293.96. The average yield has been therefore, 5.73 per cent copper, 4.23 ounces silver and .014 ounces gold to the ton.

#### Promising Mining Districts Now Being Developed.

The territory covered by the ceded strip of the Blackfeet Indian reservation, is a new mineral district that was added to the others of the state a couple of years ago through its purchase from the Indians by the government and opened to location under the mineral act. At the time of the opening there was a rush of prospectors and about one hundred quartz claims were located, the great majority of which were made on two parallel fissure veins that cut the precipitous mountains in a north-west and south-easterly direction from Divide mountain to Grinnell mountain, a distance as the crow flies of over ten miles. These veins are distinctively marked, as they cut cleanly through every formation and leave the vein matter visible above the shale covering of the lower portions of the mountains. The mountains of this district are very precipitous, ranging from 8,000 feet altitude above sea level to 12,500 feet.

Since the location of the claims mentioned, the majority of them have been placed in two groups, the two covering about all the locations made on these fissures.

One firm is running five tunnels located at different points best situated to develop and demonstrate the mineral value of about fifty claims that are under their control, and at this writing these tunnels are in approximately about 250 feet, but in no instance have as yet secured permanent mountain (thermal) water. The indications are, however, that exceptionally valuable mines will be developed when sufficient depth is secured. On Canyon creek one tunnel has secured a length of over 400 feet and are now in a high grade of clean concentrating ore, and as the surface indications, formation and vein filling is identical in all the mountains cut by these leads, there is little question that the same results will be secured with similar depths.



ON THE "CEDED STRIP,"—TETON CO.

The vein matter is an unstratified diorite and is all more or less mineralized, and on the surface, in places, shows very rich mineralization with bornite and pyrites of copper and carrying varying values of gold and silver. In the development secured throughout the district some fine ore has been revealed and many quartz streaks encountered that cut irregularly through the vein matter, and are composed of quartz, spar and practically pure metal. All of the vein matter carries iron varying from 5 to 30 per centum. The leads on which the development is in progress will vary from 15 to 40 feet in width. If the anticipated rich deposits of copper ore are revealed, as seems entirely probable, it is likely to be reduced in the immediate vicinity, as Nature has provided every economical facility. If the district turns out as anticipated and



warranted by all the surface indications and the revelations of the slight development so far secured, it will materially add to the output of mineral wealth of the state.

During the past year and a half there has been a good deal of development done in the Copperopolis district, Meagher county, with the most gratifying results. Development shafts are now down about 650 feet and at that depth the drifts and cross-cuts have encountered large bodies of rich copper ore. Ore was taken from the surface and down to a depth of about one hundred feet away back in the sixties, when the ore had to be taken overland to the Missouri below the falls and then down the river to Omaha, and notwithstanding this tremendous cost for transportation a profit was left. The installing of machinery was too heavy a cost, however, so that when the hand-made whim reached its limit and depth demanded heavy and modern machinery, the mines were abandoned. Activity was not revived in the district until a little over a year ago, but since that time work has progressed steadily on several properties and the appearances are that Copperopolis is going to be an important mining camp in the very near future.

What is known as the West Fisher district in Flathead county, has been attracting considerable attention the past year and development has been done on a considerable scale with more than encouraging results. There are several small mills running and they are proving an entire success. The leads are well defined and the gold ore is steady in its values.

Silver Camp, just across the main range in Lewis and Clarke county, has had a half dozen properties in course of development for the past two years, and the ore that is now being discovered is proving that the faith of those who have been interested in the camp was fully warranted and that the preliminary expenses of development, though they have been considerable, will soon be repaid. The ore carries gold, silver, lead and copper.

The Copper Lake district in the Stone Wall range, also in Lewis and Clarke county, is being developed and promises well.

The Sheep Eater and Boulder districts of Park county have also had a large amount of development done on various properties during the past year, and those who are investing their capital in them are doing it with the utmost confidence and with the apparent assurance of permanent and profitable returns. The properties in these districts are gold and lead bearing.

These are undeveloped districts that are now being developed on a considerable scale, but there are thousands of properties throughout the mineral area of the state that are being developed in a more or less energetic way, depending in great part on the financial ability of those controlling them. These districts, as well as the older districts, and the single properties mentioned, offer a field for the most profitable investment of new capital. The great fortunes that have been taken from the ground in this state are the reward of those who had the good judgment and the determination necessary to the undertaking of mine development. Montana has thousands of as good opportunities not yet taken; the history of fortune-making of the past, will be often re-enacted in the Treasure State.

In the introductory of the very comprehensive report of State Mine In-

spector Mr. John Byrne, he says: "A quarter of a century ago little was known of the mineral resources of the State of Montana. At that time, gold, silver, lead and copper had been discovered, but little had been done in the way of their development other than the securing of gold from the placer deposits and the most superficial prospecting of quartz leads. Much was hoped for in those early days but the most sanguine never dreamed of such accomplishments as the period since that time has witnessed. The growth of the mineral industry has been little short of fabulous and, while the achievements have been truly marvelous, the industry is only yet in its infancy. Each succeeding years not only reveals new deposits of marketable minerals, but with it also come improved methods for the winning of the treasure from the bosom of Mother Earth that increase former products and so cheapen them as to permit of competition with the most favored of other countries of the world. Already our copper has dominated the foreign markets, and the keen-sighted capitalists of the old world, recognizing our superior advantages in the possession of wonderful properties are coming here to take part in the great task of mining and manufacturing so as to be upon an equal footing with the enterprising and vigorous American.

No other state has made such strides in the production of copper as has Montana. Twenty or twenty-five years is indeed a brief period as compared with the efforts of other copper districts, but it has been long enough to make the name of Montana famous in all lands, and one that must redound to our future growth and even more rapid development.

Few residents of Montana, however, have anything like a proper conception of the greatness of their own state from a mineralogical point of view. Even those who live among the mines would be surprised at the volume of business annually done. They see the train loads of ore going out day after day, but pay little attention to them. They see the corded piles of copper plate and pig being loaded for transportation to market, but they seldom stop to compute the value." He then calls attention to the enormous mineral output of the state and to the fact that its output of copper is nearly one-quarter that of the world and nearly sixty-one per cent of that of the continent, and quoting the figures he continues:

"These figures point the source of Montana's "full dinner pail," and they as well demonstrate that as long as the advance of civilization demands the extensive use of these metals, conditions may bring periods of depression to other states, but Montana will not feel their detrimental influences.

"Copper is now produced in Beaverhead, Deer Lodge, Granite, Jefferson, Madison counties, and Lewis and Clarke and Teton promise to become important in this line, but Silver Bow is distinctively the copper county of the state.

"In the mining of its mineral Montana gives employment to a large army of men, while in the collateral industries and associated with the transporting of the product to market thousands of people are employed. The capital invested in the industry is enormous. It is not an easy matter to correctly estimate it because of the many changes constantly taking place.

"There is yet a vast territory in the state to be explored and prospected

for the marketable minerals. In the copper-bearing formations of the Rockies and branch ranges there are large tracts upon little which in this line has been done.

"The rapid growth of the great mining industries demonstrates the enterprise and energy of those whose capital and energy have in such short time placed Montana in the front rank of mineral producing districts of the world.

"While Montana has not the deepest shafts, it has the richest ore and the greatest abundance, and its mines and mills and smelters are equipped with the most modern machinery and every mechanical device of convenience and economy that native or foreign ingenuity can conceive.

There are several districts of the state where the ores are heavy with zinc, and as there are no smelters here especially adapted for the reduction of such ores, the development of these mines has been retarded by the zinc penalties levied on the treatment by the precious metal smelters, and Mr. Byrne treats this matter as follows:

"During the past two or three years there has been more attention paid to the value of zinc ores and to the study of processes for their profitable treatment. The American Smelting and Refining Co. is now adding a department to its Salt Lake plant, for the treatment of these ores, and plans are now being drawn for a plant of the most approved type for the exclusive treatment of zinc ores that will be in operation in this state in the course of the next year. This is of more than passing importance to the state, as there are several districts within its boundaries where the ores, while carrying good values of the precious metals, and in several instances a large percentage of copper, are temporarily rendered valueless by reason of the high charges made at the smelters in the form of zinc penalties. With the operation of this plant, however, these penalties will disappear and in their stead the zinc will be a value to add to the united worth of the ores. Zinc ores are found in immense quantities in Jefferson county, and the establishment of a plant that will handle its ores will enable that county to come rapidly to the front as a mineral producer. There are a number of mines already opened in this county, such as the Comet, near Boulder, the Alta at Wickes, the Grey Eagle and a number of others, that have an abundance of this class of ore ready for shipment and are in condition to continue the production for an indefinite period.

"Speaking of the complex ores carrying zinc in considerable quantities, and which are excluded from treatment in the ordinary precious metal smelters on account of their choking effects and the fact that they render the slag less fusible and as a consequence retain appreciable quantities of the precious metal values, Benjamin Sadtler calls attention to the fact that they cannot be successfully treated in the ordinary furnace for the distillation of zinc, as they usually contain so much iron and lead, which corrodes and destroys the retorts. The characteristic zinc product of the precious metal mines is of the variety known as marmatite containing so much as a component part that it cannot be separated by any of the usual magnetic processes. Ores treated with the Sadtler process ran, in the raw ore, from 16 to 30.5 per cent iron, 1.5 to 12.89 per cent lead, 2 to 9 per cent silica and 16.5 to 37.5 per cent zinc, silver 5 to 17 ounces, gold \$1.00 to \$11.00. In tests made at the Colorado smelter at



But the zinc recovery ran from 70 to 84 per cent, a sufficient percentage to justify the assumption that a large and modern zinc furnace, using these retorts, would save the ordinary 85 per cent which is considered a good average result. The cost of the process is simply that of ordinary zinc roasting and distillation plus the cost of from eight to twelve cents each for lining the retorts, and this expenditure is more than offset by the extended life of the retorts.

"The profit arising from this class of ores comes from the fact that they can be produced at a lower rate than the pure zinc ores of Missouri and other distinctly zinc districts, because of the gold and silver and other valuable metals contained making it a very profitable product.

"The highest wages have always been paid in Montana, and this, together with every modern convenience and safeguard, have attracted the best miners from the mining sections of the world, and these have made a contented and prosperous people who are enjoying the benefits made possible through the activity of these immense properties. The best of schools are open to the youth of our mining districts, and the towns contain fine public libraries, have modern improvements of sanitary and other kinds, and thrift and home adornment is to be seen everywhere.

The U. S. Assay office of Helena estimates that the gold output of the state for 1900 will be 248,000 ounces, and the silver 16,750,000 ounces.

The Engineering and Mining Journal gives the following summary of the metallic product of the United States for 1900. This summary has been compiled from advance figures furnished by producers and from official sources, and gives a complete statement of the gold production of the world for the year just closed.

The total value of the metals produced in the United States in 1900 was \$509,800,992, as compared with \$446,057,320 in 1899. The value of the output of non-metallic substances was \$755,680,991, as against \$645,754,305 in 1899. The total value for the two years, after allowing for duplications, was, respectively, \$1,157,162,182 and \$1,049,230,589. The more important items of this production in metals were, gold, valued at \$78,658,755; silver, valued at \$37,085,248; 615,756,802 pounds of copper, valued at \$100,154,345; 251,784 tons of lead, valued at \$22,005,659; 122,850 tons of zinc, valued at \$10,786,230, and last, but not least 13,914,505 tons of pig iron, valued at \$238,078,737.

Of the non-metallic products, by far the most important was coal, of which the United States produced no less than 274,847,779 tons; the greatest quantity ever produced in one year by this or any other country. In 1899 the United States was the largest producer of coal in the world, and this pre-eminence was increased in 1900.

Other important products of this class included cement, of which 187,728 barrels were made; salt, copper, sulphate, mineral paints, phosphate rock and slate, while the minor mineral products included a variety too numerous to mention.

The gold production of the world, for 1900 amounted to \$256,462,438 which compares with \$313,641,534 in 1899, the decrease being entirely owing to the stoppage of gold production in the Transvaal by the war, nearly all other producing countries showing an increase. In 1900 the United States took the lead among the gold producing countries, with \$78,658,755; Australia, ranking second, with \$75,283,215. The large production of the Klondike has put Canada in the third place, with a total output of \$26,000,000 while Russia

was fourth with \$23,090,862. These four countries produced over 80 per cent. of the gold of the world.

The total amount of dividends paid by 210 companies allied with the mineral industries in the United States was \$130,554,000. This large disbursement places mining among the most profitable of the country's industries. The metal mines paid \$51,502,000, or 39.3 per cent of the total, and the industrial companies \$79,439,000, or 60.1 per cent.

Among the leading payers were the copper companies, the gold and silver mines, \$13,907,000, and the petroleum companies, with \$48,816,000.

The following are the figures of the copper production of the world for 1899, as secured by the Engineering and Mining Journal:

	Long Tons.				Per Cent.
	1898	1899			
Algeria .....	50	6,490	D.	570	8.1
Argentina .....	125	.....	D.	50	100.0
Australasia .....	18,000	65	D.	60	48.0
Austria-Hungary .....	1,540	20,750	I.	2,750	15.3
Bolivia .....	2,050	1,505	D.	35	2.3
Canada .....	8,040	2,500	I.	450	21.9
Cape of Good Hope .....	7,060	6,732	D.	1,308	16.3
Chili .....	24,850	25,000	I.	150	0.6
Germany .....	20,085	23,460	I.	2,375	11.3
Great Britain .....	550	550	.....	.....	.....
Italy .....	3,435	3,000	D.	435	12.5
Japan .....	25,175	27,500	I.	2,385	9.5
Mexico .....	15,668	2,700	I.	600	28.6
Newfoundland .....	2,100	19,335	I.	3,667	22.9
Norway .....	3,615	3,610	D.	5	0.1
Peru .....	3,040	5,165	I.	2,125	69.9
Russia .....	6,000	6,000	.....	.....	.....
Spain and Portugal .....	53,225	53,720	I.	495	0.9
Sweden .....	480	520	I.	40	8.3
Total foreign .....	195,088	208,662	I.	13,574	7.0
United States .....	239,241	265,156	I.	25,915	10.8
Totals .....	434,329	473,818	I.	39,489	9.1
Totals, metric tons .....	441,278	481,399	I.	40,121	9.1

The following is a list of mines that have secured a depth of over five-hundred feet:

Name of Mine.	Depth.	Name of Mine.	Depth.
Anaconda .....	1,800	Blue Jay .....	1,075
St. Lawrence .....	1,600	Berkeley .....	900
Never Sweat .....	2,000	Colusa-Parrot .....	1,400
High Ore .....	2,200	Stewart .....	1,000
Bell .....	1,650	Original .....	1,200
Diamond .....	2,200	Rarus .....	1,200
Green Mountain .....	2,200	Nipper .....	800
Mountain Con. No. 1 .....	2,000	Minnie Healey .....	800
Mountain Con. No. 2 .....	1,500	Alice .....	1,500
Buffalo .....	1,600	Blue Wing .....	650
Little Minah .....	800	Magna Charta .....	700
Parrot .....	1,600	Ella .....	500
Moonlight .....	1,300	Speculator .....	1,200
Pennsylvania .....	1,400	Drum Lummon .....	1,600
Mountain View .....	1,700	Mayflower .....	980
Leonard .....	1,200	Kennet .....	600
West Colusa .....	1,300	Granite .....	1,600
East Colusa .....	900	Bi-Metallic .....	1,700
Gagnon .....	1,800	Hope .....	550
Silver Bow No. 1 .....	1,000	North Pacific .....	550
Silver Bow No. 3 .....	575	Carbon Coal Co .....	900
East Grey Rock .....	1,600	Eva May .....	600







## Great Falls and Cascade County.

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Precious Metal and Coal Mining, Smelting, Water Power, Agriculture and Stock Raising, Some of the Resources that Make This One of the Foremost Counties of the State.—The Greatest Available Water Power on the Continent and One of the Most Modern and Largest Copper Refining and Reduction Works in the World.—A Wealth of Resources and a Multitude of Opportunities That Are Yet to be Taken—Great Falls to Become the Manufacturing Center of the West.

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Cascade County was created in 1887 from parts of Meagher, Lewis and Clarke and Choteau counties, its area at that time being about 2,600 square miles. Since it was formed, there have been added to it from the northern slope of the Belt mountains 800 square miles, mostly mineral country, thus making a total area of 3,400 square miles. It has a population of 25,777 as against 8,755 in 1890, and is now the second county in the state. It is made up of mountains, table-lands and valleys. Besides the Missouri river, its principal streams are the Sun, the Smith, the Belt and the Highwood, all of which discharge their waters into the Missouri near Great Falls. Its altitude below the lower falls of the Missouri is 2,800 feet, while the altitude of Neihart its most elevated town, is 5,600 feet. The annual rainfall over the table-lands between the Missouri river and the base of the Belt mountains is from eighteen to twenty inches. Standing upon almost any plateau in this county, one can see five distinct ranges of mountains all of which are more or less heavily timbered with fir and mountain pine, while the broad-leaf and pin-leaf cottonwood grow luxuriantly in its valleys. The water in all its rivers as well as that which comes from its springs is pure and healthful. Its climate in summer is delightful as it is seldom excessively hot, while its winters, though sometimes cold, are of short duration, as this county appears to be in the direct path of the chinook winds.

The natural resources of Cascade county consist of rich agricultural and pastoral lands, water-power, coal, iron, gold, silver and lead. To these may be added fire-clay, cement rock, gypsum and lime of great purity, mountain masses of almost pure silica and building stone in many colors. Twelve years ago, scarcely half a dozen men in this county believed that any of its lands could support a farming population without a system of irrigation, but there were one or two men who were willing to try the experiment and so successful were they in growing crops of wheat, oats and barley on the table-lands, that others at once began to make settlement upon these high-lands and to engage in farming. To-day, there is a large and thrifty population of farm-



ers occupying much of the table-land country between Great Falls and the Belt mountains, and between Smith river and the eastern boundary of this county. The men who have cultivated these lands the past decade have never failed to secure profitable crops of grain and potatoes, the yields of the past year having been the smallest on record. The average annual yield of wheat per acre for the ten years in which farming has been carried on here without irrigating ditches is conservatively placed at twenty bushels. The farmers who have summer-fallowed their lands and have plowed deep, have



SCENE IN A GREAT FALLS PARK.

annual average records of twenty-eight to thirty bushels of No. 1 hard wheat carrying from fifteen to sixteen per cent of gluten. While excellent crops of timothy are grown upon much of these lands, they appear to be especially adapted to the production of alfalfa and Austrian brome. Although alfalfa under irrigation will yield from three to four crops in Montana between June and the first of October, one or two heavy crops can be grown yearly upon these uplands without irrigation.

Since 1890 sufficient experimental work has been done in fruit culture here to clearly prove that not only many kinds of small fruit can be grown abundantly in Cascade county, but that apple orchards may be successfully maintained in many parts of the county. Horticulture which has hitherto been



entirely overlooked in this part of Montana will in a few years become an important branch of farming.

The ability of the farmer to raise excellent crops here is largely due to the fact that the lands of this county consist of a mellow, sandy loam of about eighteen inches in depth, resting upon clay which acts as a reservoir in holding moisture. This friable soil easily permits the roots of grain to penetrate



RAINBOW FALLS—GREAT FALLS.

to a great depth, and to support crops during periods of drouth. The great advantage of deep plowing and of thoroughly pulverizing the surface soil has been well demonstrated by some of the farmers of this part of Montana who claim that thorough and careful farming amply compensate for lack of rainfall in this country of cool nights. Damp, hot weather and consequent blight which often destroy or greatly reduce the yield of wheat in the upper Mississippi valley are never known on the eastern slopes of the Belt mountains.

Among the foothills and on the table-lands that skirt the Belt and High-

wood mountains the most favorable conditions exist for the prosecution of the dairying business. In no part of the world can be found sweeter or more nutritious native grasses and water carrying less impurities, while unlimited facilities exist here for growing root crops and for the production of forage plants suitable for the maintenance of the soil. Here nature has provided everything for the successful prosecution of this most important branch of husbandry. All that is required to place it on a firm basis and to make it a most productive source of wealth to Cascade county is the establishment near to its mountains of colonies from Denmark, Switzerland or Holland. The large and rapidly increasing demand for dairy products in this county is now supplied from dairy farms in the Mississippi valley. This means that a sum not less than \$350,000 is taken out from the yearly earnings in Cascade county for the benefit of dairymen in other states. The rapidly growing industries of this county will alone furnish a permanent market for a large part of its dairy products, however extensive they may become.

Bituminous coal underlies a large part of Cascade county, the principal centers being Belt, Stockett, Sand Coulee, Smith river and Hound creek. The districts where coal mining is actively carried on are Belt, Stockett and Sand Coulee. But little thorough prospecting has been done here to ascertain the extent of the coal measures, but from what is already known, the supply is sufficient to meet the demands of this region for a long time to come.

Iron ores are closely associated with the coal measures of Cascade county. They are found in different qualities extending from the Missouri river to the apex of the Belt mountains. The iron ores which generally underlie the coal measures according to the analyses of Prof. Dodge are partly spathic and partly hematite, and closely resemble the clay iron stone of England. These ores generally carry about forty per cent of iron. In the foothills and extending into the Belt mountains immense leads of red and brown hematite ore are found from the Smith river country eastward to the forks of the Judith river. Many of these leads are very wide and contain ores ranging from fifty-eight to sixty-eight per cent of metallic iron and are so low in phosphorous as to give them great value for steel making by the Bessemer process. All the essentials for steel making, such as Bessemer ores, manganese, coal, silica, lime and fire-clay are found here in abundant supply.

That part of Cascade county which carries its precious minerals extends from the Big Belt mountains eastward along the slopes of the Little Belt mountains to the north fork of the Judith river, a distance of sixty miles. This area includes the mining camps of Tenderfoot, Logging Creek, Dry Wolf, Running Wolf and Yogo, besides the well-known silver-lead mining towns of Neihart and Barker.

Neihart is the most prominent town in Montana that produces silver ore almost exclusively. Although the demonetization of silver has greatly restricted the output of ore in this district for several years past, recently, owing to greatly improved concentrating methods, silver mining here is assuming new importance. The ability to successfully concentrate the low grade silver ores of Neihart has resulted in the establishment here of a concentrator of six hundred tons of ore daily. This concentrator has been built by the owners

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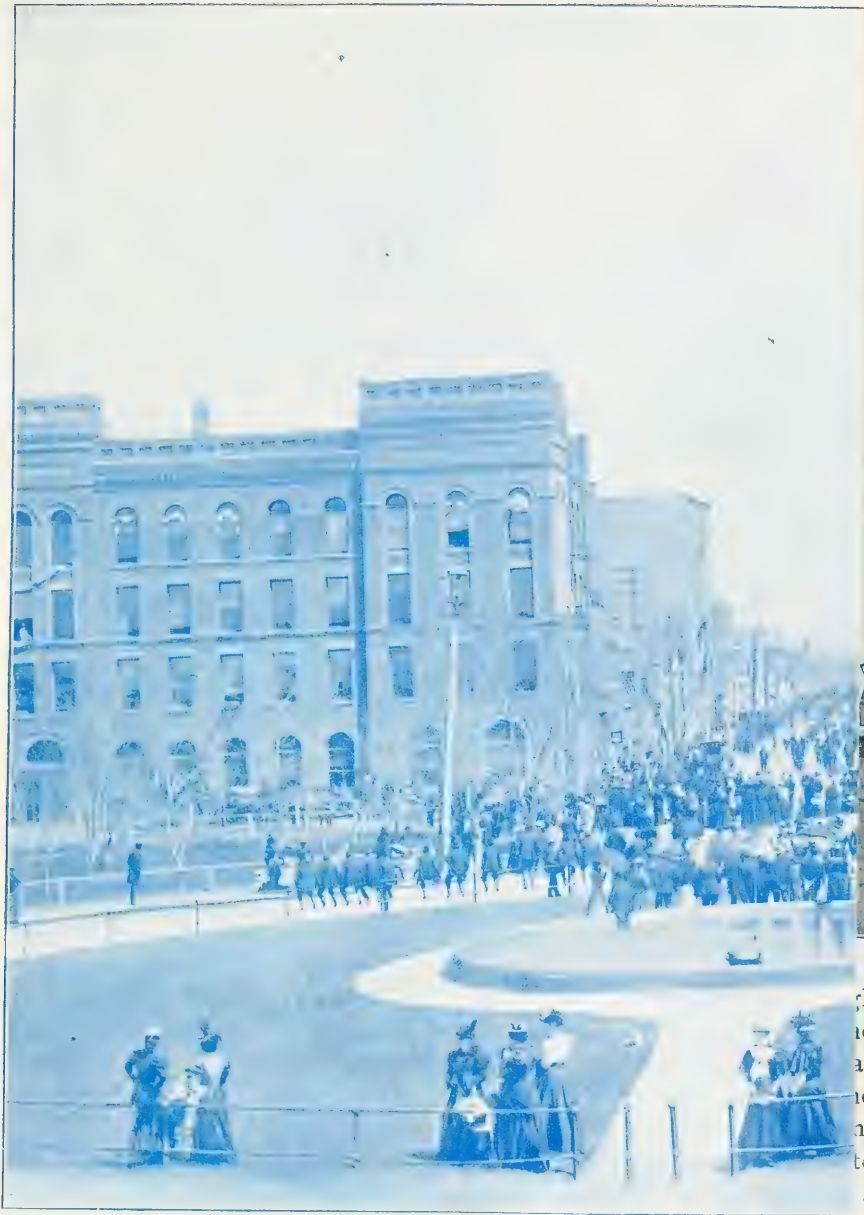
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NUE—GREAT FALLS.



of the Diamond R and Broadwater groups of mines, and is operated by water-power from Belt creek. Estimates are being prepared for another large concentrator soon to be located in this town near the Queen of the Hills mines. So successful are the present methods for treating Neihart ores, it is now absolutely certain that great and permanent activity will soon prevail here. The Neihart mining district will become one of the greatest and most enduring of the many mining districts of Montana. Work which had been suspended upon many of the well known mines of Neihart, such as the Diamond R has now been resumed, while the Florence and the Galt are being



ROYAL MILLS—GREAT FALLS.

operated with still greater activity. The Silver Belt, a mine carrying high grade sulphide ore, is now being rapidly developed by D. L. S. Barker, and extensive development work is being done on such gold and silver mines as the Big Snowy and the Ripple. While not more than three hundred and fifty men are now employed in the mining business of this town at the present time, there is every reason to believe that through the new activity given to mining by great concentrating works here employment will be afforded to a thousand men without twelve months.

The iron and manganese of Neihart and vicinity, although mined only in small quantities at present, will become of great value whenever the industry of steel making is established in northern Montana. There may be other districts in this state that are richer than this in steel ores and manganese, but as yet they have not been discovered. Neihart has telephone connection with

the principal towns of the state. It has an excellent electric light system, good schools and a large, well conducted hotel.

Barker, the most important lead-silver mining district in Cascade county has had an eventful history. Since the discovery of lead ores in this camp twenty-one years ago, it has been alternately very active and very dull. While the blow it received from the slump in silver greatly effected its output of ores, yet Barker has at times since yielded a great deal with more or less iron—thus making it a valuable flux for the smelters of Great Falls. Deeper mining will undoubtedly open up larger bodies of ore in Barker than have yet been discovered. The opinion is now held by many that when greater depth is reached in these mines, copper will take the place of lead, as in some of the mines the water holds a large per cent of copper in solution. This district is also abundantly supplied with iron ore. As the Montana Central road is extended into the heart of this mining district, it has ample facilities for the movement of its ore product. Concentrating processes will, before long, doubtless play an important part in the further development of this district.

The town of Belt situated in the valley of Belt river, is the second town in population in Cascade county. It is not only situated in the center of a rich agricultural country, but it is in the heart of one of the most extensive coal basins in this region. Its industrial and mercantile interests which are of much importance, have increased greatly in the past four years—much of its prosperity being due to the settlement of the surrounding country by farmers. Its great industry is coal mining and coke making which give employment to about one thousand men. This large business in coal mining is done by the Amalgamated Copper Company who ship the coal and coke product to the Anaconda copper reduction works. The plant at Belt owned by this company includes coal-washing machinery on an extensive scale and of the most improved type. The daily output at these works ranges from fifteen hundred to twenty-five hundred tons of coal and from one hundred to one hundred and fifty tons of coke. There are other coal mines in this town which are not operated regularly, and the output from which is at present small. This town has many well constructed mercantile buildings and its central school building is one of the best in the county.

The town of Sand Coulee where for many years was mined all the coal used by the Great Northern Railway Company from Grand Forks to the Cascade mountains, and a large part of the coal used in Great Falls including its smelters, is now being abandoned by the railway company, its field having been almost completely worked out. Much of the machinery employed here has been moved to Stockett, a short distance from Sand Coulee. It is probable that the entire coal mining plant at Sand Coulee will be removed away before the beginning of 1902. More or less coal mining will be carried on at this point by private companies, but the town will lose the most of its present population, and will cease to be the important industrial and commercial town that it was in 1890 and 1900.

The town of Stockett situated about three miles from the center of the worked out coal field of the Great Northern Company at Sand Coulee is now a very important and active coal mining town. About twelve hundred men are

employed by the Great Northern Company in and about the mines of this district, and the shipments of coal per day are from two thousand to twenty-five hundred tons. This town also has a large mercantile business, created by its own employes and by farmers who are occupying much of the surrounding table-land country. As there is a steadily growing demand for coal, the product of the Stockett mines will be increased, or new adjacent fields will be opened. The visitor to the town of Stockett is at once impressed with its great activity and with the volume of business transacted there. The mineral resources of Dry Wolf, Running Wolf and Yogo are such as to warrant great activity in those camps when a railroad is completed into the Judith Basin, along the base of the Belt mountains.



PARIS GIBSON'S STOCK FARM—NEAR GREAT FALLS.

The quarrying of sandstone for building purposes is becoming an important industry in Cascade county. Along the Great Northern railway as it passes through the valley of Sand Coulee are cliffs of sandstone in various colors fitted for structural purposes. The demand for this stone, although at present limited to a small area of country, is certain to find its way into new and extensive markets.

The manufacture of fire-brick, sewer pipe and tiling from the clays that underlie the coal and sandstone measures of this county, and the making of hydraulic cement are industries that will soon assume much importance here.

The agricultural and mineral resources of Cascade county are of much greater consequence than they could possibly be but for the great water-



power that is situated in the heart of the county where large forces of men are already employed in the reduction of ores, the refining of metals and in the manufacture of flour. Markets for the products of the farm and a short and easy haul for the ores from the adjacent mountains contribute much to the success of the farmer and the miner. The railways that lead to Great Falls from the mines of Cascade county, as well as from the copper mines at Butte



COMPANY POWER HOUSE-STOCKETT COAL CAMP.

have descending grades which make possible large trains and low rates of freight. A freight train started from Neihart without an engine would run into Great Falls, but for the hill at the town of Belt.

As the water power of the Missouri falls is the most important and far-reaching in its influence of the many resources of Cascade county, it is well to describe it as accurately as possible, and to refer to the industries already attracted to it as well as to estimate to some extent its value as a factor in the growth of this county.

This water-power is situated at a place easy of approach from all directions, being about forty miles from the point where the Missouri river breaks



ANACONDA COMPANY COAL AN

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ANACONDA COMPANY COAL AN



COKE PLANT AT BELLE, CASCADE COUNTY.

through the "Gates of the Mountains." Its magnitude is commensurate with the resources of the surrounding country, as it is produced by a series of falls aggregating five hundred and twelve feet, which yield under a conservative estimate 340,000 horse-power at the medium low stage of the river flow. The magnitude of this power is best shown by comparing it with the power at Minneapolis which has 30,000 horse-power available, at a fair stage of water, or with Lowell, Lawrence or Holyoke which have about 11,000 horse-power each. This water-power in Cascade county is seven times as large as the combined water-power of the four large manufacturing cities referred to. It is fortunate for Cascade county and for the state of Montana that power can be produced at the falls of the Missouri in large quantities as its employment must for a long time to come be largely confined to the treatment of ores, and metals, including electrolytic works, which require much power as compared with textile manufacturing. If the power at these falls were no greater than that of Holyoke or Lowell, where light running machinery is operated, it would be already exhausted by the industries established here, but so great is this water-power that thirty industrial plants as large as the copper works of the Boston & Montana company can be supplied with ten or twelve thousand horse-power each. The comparatively small cost of installing power at these falls adds immensely to its value for industrial purposes. This is shown by the cost of developing power at the upper or Black Eagle Falls which did not exceed \$10.00 per horse-power as against \$100.00 per horse-power at Minneapolis and \$80.00 at Niagara Falls. All the power from Black Eagle Falls to the foot of the lower rapids can be developed at an average cost not to exceed \$8.00 per horse power. It can be readily seen that under this low cost of development, power can be sold in large quantities for \$5.00 per horse-power, per annum which is one-fourteenth the cost of steam power when produced from coal costing \$2.68 a ton.

The fall of the Missouri from the head of the rapids in the City of Great Falls to the foot of the lower rapids, as already stated, is five hundred and twelve feet. This fall is so distributed over a distance of ten miles as to make its development possible at several places at a small expense as compared with the cost if the installment were confined to one or two places. The solid stone walls within which the river is firmly held, and the compact stratas of sandstone over which the water flows the entire length of the falls contribute immensely to the development of the whole power at a small cost.

The industries already established at Great Falls and along this water power are the smelting of copper and lead-silver ores, the refining of copper, by which process the gold and silver are extracted, the making of flour and the transmission of electric power used in street railroad purposes and in city lighting, as well as in operating many small industries in different parts of the city of Great Falls. In these industries two thousand eight hundred and fifty able-bodied men are employed. If all the water power of the Missouri falls were used in industries similar to those now established here, it would require the employment of 100,000 men.

The treatment of common minerals and their use in various industries, the making of pulp from the timber of the adjacent mountains and valleys, and



the manufacture of paper, the making of aluminum from the clays of this region, and the manufacture of plate-glass from the high-grade silica near the water power, are industries requiring much power and which the conditions here greatly favor.

Flour-making, now in its infancy, in Montana, will assume great proportions at the falls of the Missouri as the tributary country becomes settled and the flood-waters of our mountains are brought upon the rich, but dry plains of north-central Montana, for the soils of all this region possess the qualities best adapted to the growth of hard spring wheat. The question of markets for Montana's flour product is being settled by the trans-continental railways that pass through the state, and that soon in connection with freight steamships now being built, will distribute in foreign countries all the surplus farm products of Montana, Idaho, Washington and Oregon. These facilities for marketing the agricultural products of the far northwest states will operate as a new stimulus for the development of agriculture in Montana whose farm products it was believed, until recently, could find no outside markets.

Great Falls advanced in population from 3,979 in 1890 to 14,932 at the last census, and is now the second city in population in Montana. It is the manufacturing and commercial center not only of Cascade county, but of a country now being rapidly occupied, which extends north to, and beyond the international boundary, and south to the Judith pass and the Big Snowy mountains. The rich valleys of the Sun river, the Teton river and the country drained by the tributaries of the Marias river are included in the commercial territory of Great Falls on the north, while the Judith Basin embracing an area as large as the state of Connecticut, a valley of unsurpassed resources, in soil, in minerals and native grasses, is a part of its tributary domain on the south and east. This country referred to, is among the most productive agricultural sections of Montana, and will soon be thickly settled with farmers. Great Falls is now the largest center for the receipt and distribution of merchandise in Montana, while its incoming and out-going freight cars average more than one thousand per day. The mercantile business of the city for 1900 aggregated nearly \$5,000,000, and the product of its mills amounted to \$12,500,000. Owing to its excellent mercantile and banking facilities and the ample arrangements afforded for the transfer, the storage and the shipment of wool, Great Falls has become the largest market for wool in the State, its receipts the past year having exceeded 9,200,000 pounds, valued at \$1,400,000.

It has an excellent system of schools which give employment to forty-seven teachers, there being two thousand six hundred and sixty pupils in attendance. It has six modern school buildings, the last one having recently been built at a cost of \$110,000.

Its park system embraces four hundred and fifty acres—the parks, seven in number, being so situated as to accommodate the future city. Of these seven parks, three in the heart of the city are being rapidly improved, and much experimental work has been done in them to determine what trees are best fitted to the climate and soils of this part of Montana. It is doubtful if any other city between Minneapolis and the Pacific coast towns is giving as

much attention to the subject of public parks as Great Falls. Not only is much time and money being expended here in the development of beautiful and thoroughly modern parks, but its residence streets and avenues are being made beautiful with grass plats and quadruple rows of elm and ash trees. If the work of establishing wide boulevards and parks in this city is continued, it will soon become a city of beautiful residences to which health seekers from the east will be strongly attracted. The contour of the townsite of Great Falls is such that when water by means of the power at the falls, is lifted upon the most elevated point within the city limits, it can be conducted by gravity through all parts of the city at a small expense.



A CASCADE COUNTY WHEAT FIELD.

The present water supply owned by the city is pumped from the Missouri river above the present townsite and is considered ample to meet the demands of double the present population of the city.

The public library also owned by the city, contains more than six thousand volumes. Land adjacent to the present library site has recently been acquired and the building is to be greatly enlarged the present year. Several of the thirteen church buildings in this city are to be enlarged and a number of new church edifices are to be built before the close of the year. There are two thoroughly constructed and well equipped hospitals here, one being under the control of the Sisters of Mercy, and the other under the control of the Methodist denomination.

The city has four banks with a capital stock of \$500,000 and deposits aggregating \$2,500,000.

In the field of newspaper work, Great Falls occupies a conspicuous place. The Tribune Company and the Leader Company both issue daily and weekly editions with full Associated Press reports. These companies are both



financially strong and the business of each is rapidly increasing and their influence is widely felt in the advancement of this city.

Among the industries of Cascade County heretofore mentioned, the two brewing and malting plants of Great Falls should be mentioned. Both the Montana and the American breweries are large institutions and are thoroughly modern in all their appointments. \$350,000 have been invested by these companies and the annual product amounts to \$300,000. The beer produced in Great Falls alone prevents an outflow of \$200,000 annually, from



"THE GREATEST SILVER CAMP ON EARTH"—NEIHART, CASCADE COUNTY, MONTANA.

Cascade county, while the malting works are acting as a great stimulus to the production of barley on the table-lands of Cascade county.

The Port of Entry for Montana and Idaho is located in this city and a very large and rapidly increasing international business is transacted here, as this is a southern terminus for the Canadian railway lines.

The railways entering Great Falls are the Great Northern, the Montana Central (this being part of the Great Northern system) and the Great Falls and Canada railway, connecting Great Falls with the Canadian Pacific railway at Lethbridge, Canada. Although the Burlington and Missouri Company has not extended its line north of Billings, it has a route from Billings to Great Falls carefully surveyed, and it is confidently believed that this com-





BLACK EAGLE FALLS AND THE BOSTON AND MONTANA COPPER SMELTERS, MILLS AND REFINERIES, GREAT FALLS.



pany will soon push its line forward to Great Falls in view of its large and rapidly growing commercial and manufacturing interests. The Bismarck, Washburn and Great Falls company have their road completed from Bismarck to Washburn, and it is understood that measures will be taken to extend the road westward at an early day into the Judith Basin, and thence to Great Falls. The magnitude of the water power of the falls of the Missouri and the productive capacity of the mineral and agricultural lands tributary to it, will make Great Falls one of the most important railroad centers in the west before the close of the present decade.

In entering upon the new year and the new century, Great Falls may be congratulated upon its rapid and substantial growth especially during the past year, and upon the bright future that awaits it. Being far removed from other industrial and commercial centers, its growth will keep step with the progress of its great tributary country, which is being rapidly developed.

While the improvements in Great Falls during the year 1900 exceeded \$2,000,000, they will be largely surpassed by the improvements of 1901. It is estimated that from four hundred to five hundred dwelling houses will be built here during the present year as there are no empty houses to meet the pressing demand. The most thorough surveys of the water power at the group known as Rainbow, Colters and Crooked falls and complete plans have been made for the installment there of the entire power. This preliminary work has been done preparatory to the construction of a dam at the head of Colters falls by which the entire fall of one hundred and five feet can be made available for the production of power. It is expected this improvement will be completed before the close of the year. This development of power will, in a short time, add greatly to the pay-roll of Great Falls as it will be followed by the establishment of large electrolytic works and additional reduction works. The new railway route now being built from Portage Coulee into Great Falls and which after crossing the Missouri river above Rainbow falls, not only presents to the traveler grand and interesting scenery, but it brings the Great Northern road where the contemplated new industries will be established. A magnificent steel bridge costing \$100,000 will span the river at this point.

At the last county election, bonds were voted for the construction of a court house in Great Falls to cost \$200,000, and work upon it will be commenced early in the spring of the present year. The stone for this building will be taken from one of the quarries adjacent to the city. During the last session of congress a bill passed the senate appropriating \$200,000 for a federal building in Great Falls and it is expected the measure will be adopted in the house at the present session of congress.

Among the many improvements worthy of note that will be made here early this year is the building of four church edifices by the Catholic, Methodist, Presbyterian and Swedish Lutheran Societies, costing in the aggregate \$75,000. Work on the gas plant on ground at the corner of Sixth street and Eighth avenue north, will be commenced early in the spring and will be pushed rapidly to completion. This plant to be constructed upon the most approved plans, will be employed for heating as well as lighting purposes. The



Great Northern Railway Company will this year build a permanent freight depot to the wool warehouse, a distance of about eight hundred feet. This building will be of brick and stone and will be fire-proof. An entire block on Third avenue north, has recently been bought by the Ursuline Nuns who are about to establish an educational institution here which will be of much value to the state.

Nearly all the benevolent and protective societies in the land have chapters here, and ample accommodations have been provided for athletic sports.



AN IRRIGATED FARM NEAR GREAT FALLS.

One of the most interesting and attractive features of this city is the sheet of water made broad and deep by the uplifting of the sand stone strata in the Missouri river just above the old fording place, and near the present railroad bridge thus forming a natural dam. In this lake or widening of the river is a group of islands, six in number, named the "White Bear Islands" by Lewis and Clarke. This beautiful lake is admirably fitted for aquatic sports and will forever remain one of the attractive features of this city. Hitherto no good roads have been made from the hotels of Great Falls to the various objects of interest that are presented at the several falls and in the canyons of the Missouri river below the city, but as the Business Associations of Great Falls are agitating the subject of good roads around the city, it is hoped these natural objects of interest will soon be made easy of approach.

Although the industrial development of Cascade county began only ten

years ago, there are now employed in its various industries aside from farming, not less than 5,500 men. This employment of a large number of men while this county is young and with its resources in minerals and water power just touched upon, points surely to a time not far off when many more thousands of men will find employment in new and enlarged industries; and it suggests the importance of building up in this county farming and gardening on the largest scale possible in order that the cost of living to the mechanic and the miner may be greatly reduced, and that the money earned in the mills and factories may, as far as possible, be kept at home. Farming on an extensive scale throughout Montana is absolutely essential to the establishment of manufacturing interests here, commensurate with its great resources.



WATERING THE SHEEP.

## ***“The Greatest Copper Camp on Earth.”***

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Silver Bow, the Smallest County in the State, the Richest Mineral District in the World—Butte, the “Greatest Copper Camp on Earth,” Founded on a Mountain of Copper—The Future of Butte Even Greater Than Its Past.

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Within the little area of two miles from the center of Butte, more mineral wealth is produced every twelve months than is produced by the whole state of Colorado in a year.

Under this most remarkable place in the world, at once a noisy, bustling mining camp and a splendid metropolitan city, exists the very core of one of the most remarkable copper deposits ever discovered. On this is Butte founded. Yet not on this alone. In its development it has become a great trade center. Four lines of railroads give it facilities for carrying on its immense business, and the time is near at hand when, considered commercially and independent of the mines, it must become one of the most important cities in all the inter-mountain region.

Its permanency is assured. When its people ceased constructing little frame shacks and began to build substantial houses of brick and stone; when the most far-sighted of its business men began to invest fortunes in the construction of handsome business blocks and residences; when, in brief, they began to show confidence enough in the future to prove that they themselves intended to spend their lives here, there is no room for doubt as to the abiding faith of the people of Butte in its future.

That faith has been shown during the last few years in many ways. The lines that marked the former limits of the residence portion of the city have been extended in all directions, hundreds of handsome homes have gone up during the past year, and Butte enters the new century transformed.

The money on deposit in the banks of Butte amounts to more than twelve millions of dollars, and by far the greater portion of this belongs to the men who go down into the mines, who work in the mills and smelters and who assist in turning into the channels of the world the constant stream of wealth that flows from the hills.

Not only in its material aspect has Butte developed. Recognizing the fact that educational facilities are essential to a city of homes, great attention has been given to the development of the public school system, which has become the pride of its citizens.



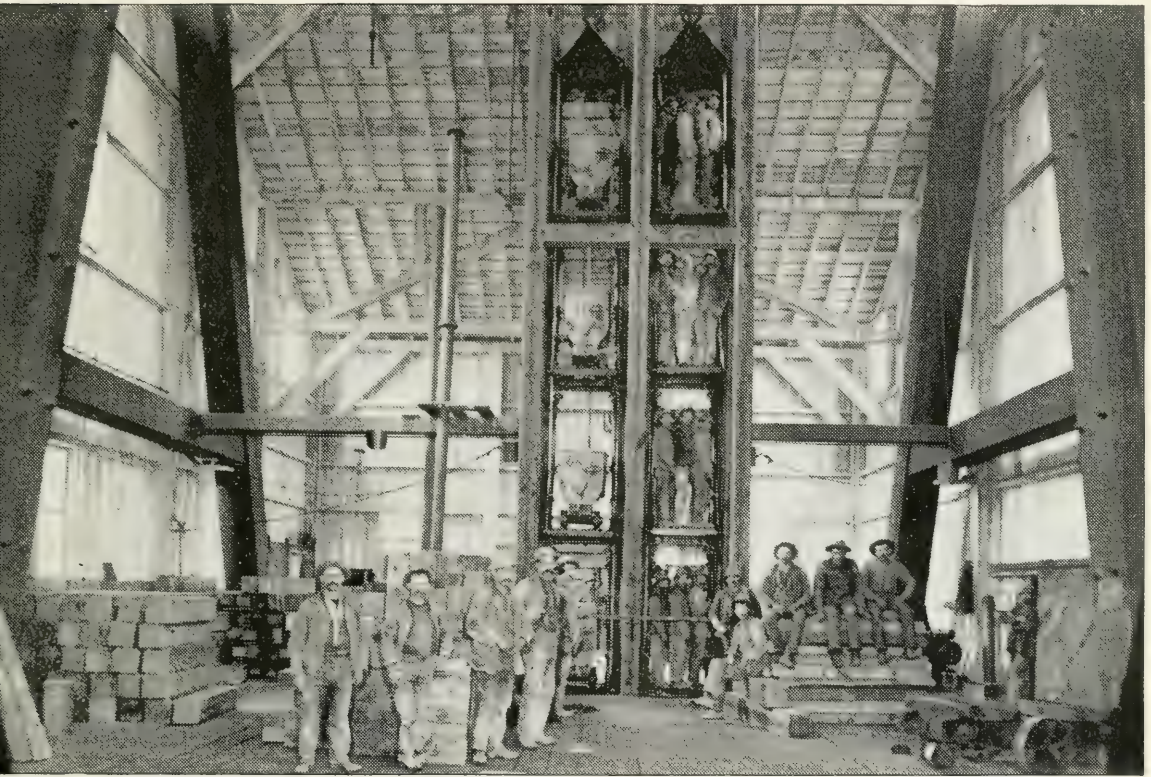




Butte possesses one of the finest street car systems in the west, and under the liberal methods followed by its owners the full benefits of rapid transit are enjoyed by the people of the city and suburban towns.

It has a perfect sewerage system, and at this time a water works system is being completed on a scale truly magnificent, the estimated cost being over a million dollars. Yet with all these public improvements, the rate of taxation in Silver Bow county is the lowest of any county in the state.

The stranger who comes to Butte finds himself in a wonderland where strange things never quit happening, where both accident and industry make men rich almost before they know it and where mad-cap luck tosses favors



INTERIOR OF SHAFT HOUSE. SHOWING FOUR-DECK CAGE-BUTTE.

about with a hand as prodigal as it is inconsiderate. He strikes a town whose people are as confident of its future as they are proud of its past; a country where in one shape or another, mineral manifestations are written in the rocks at the surface; a country where more wages are paid to miners by 200 per cent than are paid in Spain, Australia, Africa or Mexico, and yet where more profits are realized from the mines than in any other section of the globe.

No wonder the people of Butte wear a cheerful countenance. Their city, marching forward at a pace as steady as it is rapid, is established upon a substantial foundation and is prosperous because it has fairly earned prosperity.

On the future of Butte who shall speak? In it are bound up possibilities hard to grasp. It opens up a vision laden with a wealth of natural and arti-



ficial products, a golden harvest of the metals, a commercial trade with a vast area of country and a constantly increasing population of enterprising, industrious people who are content to make the future of Butte their own.

Butte is a live, enterprising city and its people are fully abreast of the times in all that an intelligent, wealthy and progressive people can achieve



A SAMPLE BUSINESS BUILDING OF BUTTE.

for public or personal welfare and comfort, and affords opportunities unexcelled, if equalled, on the continent for those who are competent or able to engage in mining or kindred enterprises.

Montana's prestige as the greatest mineral producing country on the globe is due to the wealth derived from the inexhaustible copper and silver mines of Butte. Its copper mines are the wonder of the world. During 20

years of development their production has increased to such an enormous extent that the Butte district now furnishes more than 25 per cent of the world's entire supply of copper. Should the copper mines of the Butte district shut down for three months there would be a copper famine in Europe and America and every industrial center on the globe would be affected thereby to an almost revolutionary extent.

Millions upon millions of dollars have been invested in the copper in-



GAGNON HOIST—BUTTE.

dustry in the Butte district; millions of dollars are paid out each year in wages to the men employed in the mines, while millions more go into the pockets of the eastern capitalists whose faith in the permanency of the copper deposits of Butte has never wavered. Mammoth hoisting plants, splendidly equipped with the latest improved and most costly machinery, dot the hill-sides within a radius of two miles of the city, magnificent reduction plants, amazing in their immensity and supplied with everything that the genius of two continents could devise for the economical treatment of ore, are located within convenient distances from the mines, while every appliance that would



tend to lessen the cost of mineral production without diminishing the wages of the workers, can be found in successful operation here.

Copper will be the chief product of the Butte district for the next quarter of a century. That is the judgment of some of the greatest geologists and mining experts, founded on a thorough and very impartial examination of the ore deposits of the district, and of the men who have invested their millions



OWSLEY BLOCK—BUTTE.

in the mines. Twenty years ago the great Anaconda mine was an insignificant "prospect," while the other great producers of the present day were almost unknown. The mines of the Lake Superior district have been worked continuously for more than half a century and are yet great producers with every indication of their continuing so for the next half a century. There the mines are developed to a depth of over 5,000 feet. Here in Butte the deepest shafts have only reached a depth of 2,200 feet. It has been demonstrated at every copper mine in the district that the ore improves and is enriched



with depth. This has been shown at the Anaconda and Boston & Montana properties, where millions of tons of high grade ore have been blocked out during the past year. In not a single copper mine in the district is there the slightest indication to show that the bottom of the ore deposits has been reached.

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### Butte's Production in 1900.

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The mining district of Butte has far outstripped all other mining districts in the world in the production of minerals during the closing year of the nine-



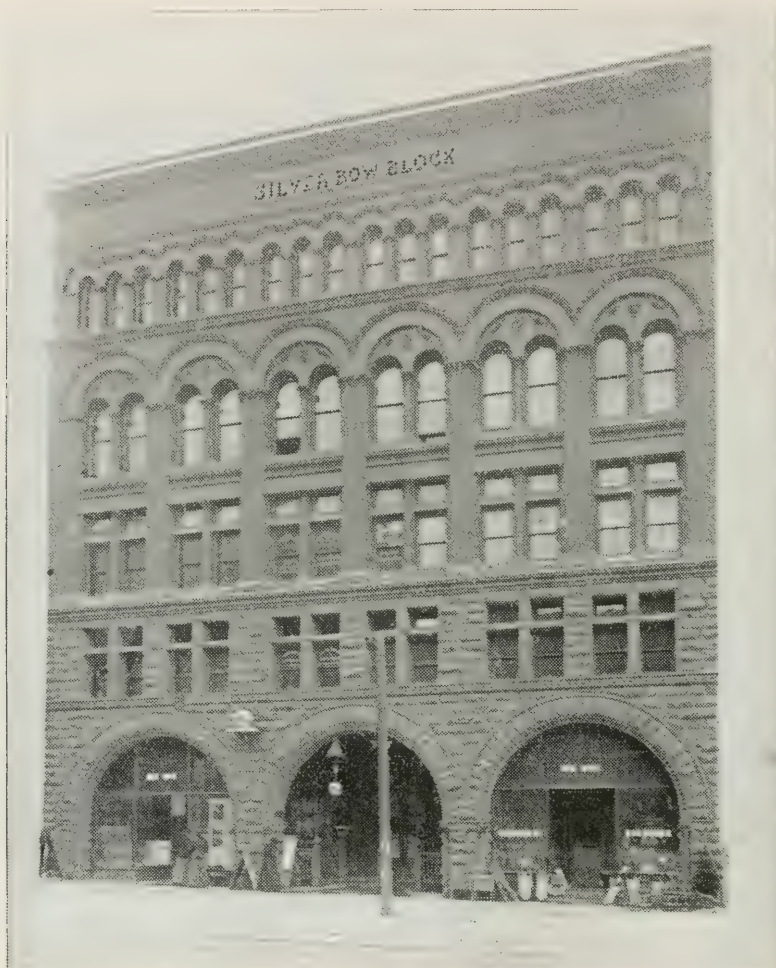
LEONARD SHAFT—BUTTE.

teenth century. People unacquainted with mining and the extent to which it is carried on in Butte, can scarcely conceive the enormous amount of money the mines of this district have added to the imperishable wealth of the world measured in dollars, the production reached in round numbers, the stupendous total of \$50,000,000.

The figures of the recent census give Butte and its environs about 46,000 people. This means that Butte's mines added to the world's wealth during the year considerably over \$1,000 for every man, woman and child in the community. This gratifying showing has been achieved without any special effort on the part of the mining companies. On the contrary several of the large producing mines have been closed down at times during the year for

various reasons, notably the Parrot, owing to the fire of last summer, and the Anaconda, owing to an accident to the machinery.

The Anaconda led in the matter of production. The product was about 112,000,000 pounds fine copper, nearly 4,000,000 ounces of silver and nearly 15,000 ounces of gold, the silver and gold being by-products of the copper. The total valuation of its production was \$20,928,208. During the year this company paid out about \$5,500,000 for labor.



SILVER BOW BLOCK - BUTTE.

The Boston & Montana was second as a producer. Its product was 75,000,000 pounds of fine copper, 1,312,500 ounces of silver and 4,811 ounces of gold. The total valuation of the product was \$12,896,845.

The Butte & Boston was next. Its production of fine copper was 24,000,000 pounds; silver, 936,000 ounces and gold 1,600 ounces. Total valuation of production, \$4,733,600. This company has only been operating its own smelting plant since February.

The Colorado Company produced 11,281,578 pounds of fine copper; 1,251,-

988 ounces of silver and 21,303 ounces of gold, the valuation of which is \$3,-251,232.

The Colusa-Parrot produced approximately 12,000,000 pounds of copper, 750,000 ounces of silver and 2,500 ounces of gold, of a total value of \$2,427,500.

The value of the product of the Montana Ore Purchasing company for 1900 was \$2,150,000.

The Parrot Company's production during the year was 11,400,137 pounds of copper, which with the gold and silver values amount to \$1,613,352.

The Washoe Company's production was 4,263,727 pounds of copper, 280,579 ounces of silver and 641 ounces of gold. The total value of the production was \$887,333.

The production of the Speculator mine during the year 1900 amounted to about \$1,312,000.

To give the reader who is not familiar with mines and mining an idea of the immensity of some of the larger institutions, we quote the following reports that are made under the provisions of the law:

## ANACONDA COMPANY.

Mines operated—Anaconda, Mountain Con., Green Mountain, Bell and Sampling Works.

Tons of ore extracted .....	1,421,500
Gross value, per ton .....	\$ 13.18
Cost of extraction, per ton .....	4.38
Total cost of extraction .....	6,228,655.25
Cost of transportation (27 miles), per ton .....	.21
Total cost of transportation .....	300,031.58
Cost of reduction, per ton .....	3.77
Total cost of reduction .....	5,354,145.79
Paid for labor .....	5,878,851.47
Paid for machinery and supplies .....	5,703,949.57
Freight .....	300,031.58
Marketing products .....	1,481,780.73
Net proceeds.. .....	5,365,518.15
Recapitulation:—	
Gross proceeds .....	18,730,131.50
Cost of mining.. .....	6,228,655.25
Freight on ore .....	300,031.58
Cost of reduction .....	5,354,145.79
Selling and marketing .....	1,481,780.73
Net proceeds .....	5,365,518.15

## BUTTE &amp; BOSTON COMPANY.

	Blue Jay.	Other mines
Tons of ore extracted.....	31,104	122,372
Cost of extraction, per ton .....	4.86	6.19
Gross yield per ton .....	\$ 14.61	\$ 14.61
Total cost of extraction .....	151,244.70	750,567.31
Cost of transportation, per ton .....	.22	.22½
Total cost of transportation ....	6,959.94	27,382.82
Cost of reduction, per ton .....	3.59	3.59
Total cost of reduction .....	111,659.77	439,331.98
Paid for labor .....	134,715.83	630,968.08
Machinery and supplies .....	127,030.48	567,089.37
Selling and marketing products ...	35,949.43	41,437.90
Net proceeds .....	150,481.84	420,831.46
Total for all mines:—		
Paid for reduction, per ton.....	\$ 3.59	
Total for reduction.....	550,991.75	
Paid for necessary labor .....	765,683.91	
Paid for machinery and supplies .....	694,119.85	
Selling and marketing products .....	177,387.33	
Net proceeds.....	571,313.30	
Total cost of production, per ton .....	5.93	
Total cost of production .....	908,812.01	
Transportation, per ton .....	.22½	
Total for transportation .....	34,342.76	
Net proceeds of Blue Jay .....	150,481.84	
Net proceeds of other mines ..	420,831.46	



## COLUSA-PARROT COMPANY.

Burt, Woolman, Home, Original, Stewart, Dives, Colusa and Parrot.	
Tons of ore extracted .....	2,068
Gross yield per ton .....	8.93
Cost per ton for extracting .....	3.76
Total cost of extracting .....	778,800.00
Transportation per ton, (two miles) .....	.30½
Total for transportation .....	63,112.00
Cost of reduction, per ton .....	3.29
Total cost of reduction... ..	681,445.00
Paid for labor .....	481,234.00
Supplies .....	297,566.00
Net proceeds... ..	325,044.00

## COLORADO COMPANY (GAGNON MINE.)

Expenditures from June 1, 1899, to May 1, 1900 .....	\$560,138.38
Receipts .....	657,562.24
Proceeds for 11 months .....	107,423.86
Add one month, average .....	9,765.80
Concentrator profits, one year .....	25,391.98
Net proceeds for 12 months .....	142,581.64

## PARROT SILVER AND COPPER COMPANY.

Gross production .....	\$1,429,727.99
Cost production .....	629,072.52
Net proceeds .....	800,655.47

## ALICE GROUP OF MINES.

Ore milled, tons.. ..	6,945
Yield, 132,134 ounces of silver, 57 cents per ounce .. ..	\$ 75,316.38
Yield of gold .....	8,114.63
Ore sold, 5,228 tons .....	107,541.32
Total .....	190,972.33
Expenses .....	206,544.66
Loss in operation .....	15,572.33

The Alice mine is a silver proposition almost exclusively, and is owned by Walker Brothers of Salt Lake.

## LEXINGTON MINING COMPANY.

Tons of ore extracted .....	2,443
Value per ton .....	19.89
Cost per ton for extraction .....	11.18
Total cost of extraction .....	27,368.26
Cost of transportation (two miles) .....	.50
Total cost of transportation... ..	2,449.00
Cost of reduction, per ton .....	7.44
Total cost of reduction .....	18,221.00
Paid for labor .....	23,215.00
Paid for supplies .....	3,264.00
Improvements .....	888.54
Net proceeds .....	667.21

## SNOHOMISH AND TRAMWAY.

Gross yield from August 2, 1898, to June .....	79,800
Number of tons .....	25,400
Net Proceeds.....1, 1900 .....	\$79,800

## SPECULATOR (J. A. CREIGHTON AND LARGEY ESTATE.)

Tons of ore extracted .....	9,543
Net proceeds .....	\$92,185.38

## MONTANA ORE PURCHASING COMPANY.

Net proceeds .....	\$400,000
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## BOSTON &amp; MONTANA COMPANY.

Net proceeds .....	\$6,073,153.34
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## Extension of the Copper Belt.

The developments of the past year in the mines of the Butte district tend to confirm the long-cherished belief of the best posted mining men of the country, viz: that within a short period the copper zone of the district will be very materially extended, and that instead of the present limited area the copper belt will include all that country between Butte and the main

divide of the continental range on the east and the flats on the south of the city. The Smokehouse shaft is now being developed in the heart of the city for the purpose of determining whether the big ledges of Anaconda hill run through the southern portion of the city as many mining men believe. This shaft is making splendid progress and it is expected that by May of next year the lead will be cut exposing a big body of copper ore.

East of the city, in the Park canyon district, considerable capitol has been invested by well known operators in Butte mines, in the development of that district and results have been so satisfactory that it is confidently believed that within another year regular shipments of copper ore will be made from



PARROT AND CLARK'S COLUSA MINES--BUTTE.

this locality. The development work is largely confined to the Homestake mine, but eastern capitalists have invested considerable money within the last year in adjoining properties upon which it is expected work will be commenced early next year.

In the southern portion of the city within recent years new and rich ore bodies have been opened up. On the flat directly south of the city splendid copper indications have been discovered and the belief is generally held that a deep shaft is all that is necessary to open up another copper bearing area. North of the city the copper belt has been extended within the past year to the Gem and other mines hitherto considered beyond the copper bearing area.

### Butte's Payrolls.

Butte disburses more money to the men and women employed in its various industrial interests than any town of twice its size in the country chiefly because labor here receives the highest rate of wages in the United States. The various mining companies pay out each month more than a million dollars in wages to the men employed at the mines. Add to this the amount paid by the smelters and the various mercantile and manufacturing houses of Butte and the total is not far from \$2,000,000 per month.

The following table is compiled from the report for 1900 of the State Mine Inspector. It shows the number of men employed during the present year in the mines of the Butte district:

#### Number of Men Employed.

Anaconda Mines .....	3,931	Washoe Company .....	163
Boston & Montana .....	1,389	Speculator .....	148
Butte & Boston .....	629	Minnie Healey .....	88
Montana Ore Purchasing Co .....	618	Alice .....	76
W. A. Clark's Mines .....	533	Other Mines .....	500
Colorado Company .....	316		
Parrot Company .....	288	Total .....	8,679

#### Depth of the Principal Mines of Butte.

Diamond .....	2,200	Bell .....	1,650
Green Mountain .....	2,200	Parrot .....	1,600
High Ore .....	2,200	St. Lawrence .....	1,600
Mountain Con .....	2,000	East Gray Rock .....	1,600
Never Sweat .....	2,000	Colusa-Parrot .....	1,400
Anaconda .....	1,800	Pennsylvania .....	1,400
Gagnon .....	1,800	Speculator .....	1,200
Mountain View .....	1,700		

#### Dividends Paid by Butte Companies During 1900.

Boston & Montana .....	\$6,450,000
Anaconda .....	4,800,000
Parrot .....	1,379,000
Butte & Boston .....	1,000,000
Montana Ore Purchasing Co .....	160,000
Total .....	\$13,789,000

The site of Butte is on the gently sloping side of a mountain, on the north of a beautiful valley and commanding a magnificent view of one of the most fertile regions of the state. The city has an elevation of 5,758 feet above tide water. Two miles to the east is the main range of the Rockies; on the west the huge, isolated butte or hill from which the city takes its name.

The climate is remarkably healthy, the winters preserving a golden mean between the bitter cold weather of the north and the enervating climate of the south. The death rate is the lowest of any city in the Union. It is an ideal climate for those suffering from lung troubles.

Butte has a delightful society, capable of satisfying everybody's taste. If you wish to meet with refined and cultivated people, college-bred and broadened by travel, they are here and happy to know you. If you like plain, common, everyday folk, whose hearts are perhaps better than their manners, they are numerous and sure to be friendly.

The importance of public schools escape no western community and in Butte the people have been liberal and public spirited to a degree unusual even in western states. Fully 95 per cent of the children of Butte of school age are in actual attendance on the public schools. Butte has 14 school build-



ings (not counting the annexes) with 14 principals in charge and 165 teachers of all grades. A fair estimate of the attendance of pupils, in round numbers, would be 6,500. The buildings are of brick and stone and will compare favorably with those of the most cultured communities in the eastern states. The High school building is one of the best structures in the west, costing up-



SILVER BOW COURT HOUSE-BUTTE.

wards of \$100,000. The total cost of all the school buildings in Butte was upwards of half a million dollars. The total expenditures for the present year were more than \$200,000, the monthly pay-roll of the teachers being about \$15,000. The schools of Butte have a splendid reputation for efficiency all over the west and the facilities for imparting information to the youth of the city cannot be surpassed anywhere. Especial care is taken in the selection of the corps of teachers each year, none but the brightest being retained.

There are also two parochial schools which are well attended, a business college, a conservatory of music and numerous private schools and academies.

Butte has 12 handsome churches which are the pride and glory of its

people. Every denomination is represented and the clergymen of Butte are noted for their culture and eloquence. They are progressive gentlemen, liberal in their views and thoroughly devoted to the noble work of uplifting the morals of the city.

Butte has one of the best equipped libraries in the whole northwest. The building cost \$100,000 and contains 30,000 volumes. It is well patronized, the November (1900) issue of books for home and library use being over 13,000. It is supported by a city tax of one mill on the dollar.

The city has long since attained the proportions of a metropolis. Splendid steel, brick and stone structures have been erected. The Hennessy build-



GREEN MOUNTAIN MINE—BUTTE.

ing cost \$250,000. Among the other buildings are the court house which cost about \$200,000, numerous school houses costing \$75,000 each, two opera houses one costing \$50,000 and the other \$35,000, and another costing \$100,000 in contemplation, two first-class hotels, costing \$60,000 and \$45,000, respectively, and one almost completed at a cost of \$125,000. There are various other blocks in the city costing from between \$30,000 and \$75,000. The size and permanent appearance of the structures are indicative of the wealth and prosperity of the city. Many of the residence buildings are the finest in the west. The city is rapidly extending in all directions. During the first eleven months of 1900 the cost of the buildings erected in Butte aggregated \$1,000,000.



Butte is supplied with all the modern conveniences of a metropolis. It has two splendid electric light plants, a telephone system connecting with all point in the west, two lines of telegraph, a street railway system to all the suburbs, excellent police protection and within the next month will have the finest water works system in the west.

Three daily newspapers are published in Butte, each of which receives the Associated Press report. They are the Standard and Miner, both morning papers and the Inter Mountain an afternoon paper. There are also six weekly newspapers published in Butte and all receive a fair share of patronage.

Butte is one of the strongest labor union towns in the country. It has



PENNSYLVANIA MINE—BUTTE.

some of the strongest labor organizations in the west, and every craft is organized. The unions of Butte, however, have conducted their affairs so conservatively, that there has never been a labor strike in the town. Capital and labor have ever been on the most friendly terms in Butte. Many of the largest mine operators of the district at some time in their lives toiled in the mines. The unions command the respect and receive the support of the people and as a result of their organized efforts the rate of wages is good and the standard of living is high.

Butte has an energetic and earnest corps of health officers, and the sanitary conditions of the town are closely attended to.

The banking houses of Butte are as solid as a rock, and few banks in any city transact as much business as the five banks of Butte. Their stability was tested during the panic of 1893, at a time when banking houses in all parts of the country were being dashed to pieces. Not a bank in Butte succumbed.

The five banks in Butte are the First National, Silver Bow National, State Savings, Clark & Bro., and Daly, Donahoe & Moyer. In addition to



these James A. Murray has a private bank. The total deposits, subject to check or certificate, amount to about \$12,000,000, which for a town the size of Butte is a splendid showing. The State Savings bank has deposits amounting to nearly three and a half million dollars. The First National bank has individual deposits amounting to a million and a half, and demand certificates of about \$750,000. The Silver Bow National has over half a million on deposit. The banking house of W. A. Clark & Bro. makes no public statement but in view of the fact that Mr. Clark is a large employer of labor it is reasonable to infer that the deposits there are as large as in the other banks. The



ALICE MINE-BUTTE.

deposits at the bank of Daly, Donohoe & Moyer amount to about \$3,500,000. Nearly all of these deposits belong to the men who toil for a living.

Four lines of railroads enter Butte and ten of the great railroads of the country maintain their representatives and offices in the city. All are doing a splendid business. Butte is one of the greatest railroad towns in the west, the business done being phenomenally large. It is estimated that over half a million tons of freight was handled in Butte during the past year. This includes the great quantities of timber used in the mines. In some of the big mines of the camp over 150,000 feet of timber are required each day, the aggregate reaching into the billions of feet each year. The internal transportation is splendidly handled by the Street Railway company, which also operates an ore line, hauling the ore from several of the mines to the smelters. The ore handled by the railroads of Butte in a year amounts to thousands of tons.

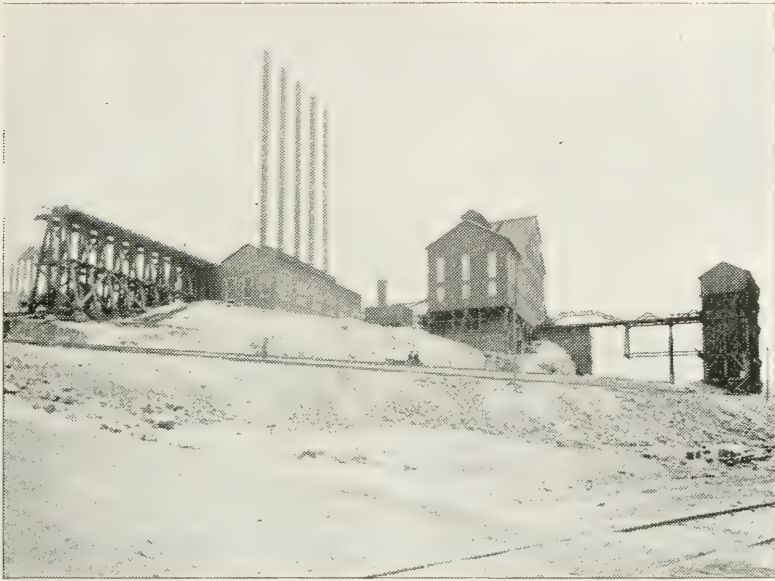
The railroads operating lines in Butte have shown a very liberal policy in their dealings with the people and the people have reciprocated in kind. During the year the railroads have expended several thousand dollars in improvements.

There are six well-equipped hospitals in Butte to care for the sick. Several of the hospitals are supported by the miners, who pay a dollar each month.

All the leading fraternal, benevolent, charitable and religious organizations are well represented in Butte. Among the most prominent may be mentioned the Masonic, Knights of Pythias, Odd Fellows, Druids, A. O. U. W., Elks, Good Templars, Red Men, Maccabees, Sons of St. George, Junior Order, Sons of Hermann and Order of Pendo.

There are several women's clubs and Chautauqua literary and scientific circles.

The population of Butte as given by the last census was 47,635. Evidence



NEVER SWEAT MINE—BUTTE.

has accumulated since the census was taken to show that a great proportion of the population was overlooked. Butte has a population of at least 60,000. In 1890 the town had an estimated population of 30,000. Twenty years ago it had a population of 5,000. Thirty years ago it had a population of 350.

#### Some Facts About Butte.

Silver Bow county has the lowest rate of taxation in the state.

Silver Bow county has the highest assessed valuation in the state, \$36,264,637.

The value of personal property in the county exceeds that of real estate, personal property being valued at \$19,582,140 and real property at \$16,005,890.

In the past ten years Butte copper mines have paid in dividends \$43,295,323.

During the past ten years the Boston & Montana Copper Company has

paid in dividends \$20,975,000, and during the past year this company has paid \$6,450,000 in dividends.

Since 1896 the Anaconda Copper Company has paid in dividends \$16,950,000. During the year 1900 this company paid in dividends \$4,800,000.

The Parrot mine has paid in dividends to date \$4,370.00 and during 1900 paid \$1,335,000.

Butte & Boston paid one dividend of \$1,000,000 during 1900.

The first railroad entered Butte just 19 years ago.

Between 1870 and 1885 the yield from Butte's placer and quartz mines aggregated \$39,606,000.

Butte's mineral output for 1900 will amount to \$49,176,070.



WEST COLUSA, BUTTE & BOSTON-BUTTE.

Figuring the gold and silver at their coinage value and the copper at an average price of twelve cents per pound, the total output of the three metals from the quartz mines of Butte since 1882 will amount to \$589,217,502.

Butte is the wholesale center of the state.

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### Paving.

During the past four years Butte has expended \$215,000 in the paving of its streets. Ten full blocks were paved last season. The principal business streets of the city are now paved, and it is very likely that during the coming year considerable of the residence portion of the city will also be paved. The paving is of the most substantial character, being of granite blocks upon a concrete foundation. It is likely that the residence portion of the city will be paved with a combination of asphalt and macadam.







#### Assessed Valuations.

Real, \$10,751,286; personal, \$3,797,149; railroads, \$703,393; total \$15,251,828.

## Lewis and Clarke County and Helena.

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**Mining of Gold, Silver, Lead and Copper, Agriculture and Stock Raising  
Produce Great Wealth Each Year—Helena the Capital and Banking  
Center of the State.**

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Lewis and Clarke county has as varied and as valuable resources as any county in the state. It is one of the largest producers of gold and silver, and has a large area of farming land that is already occupied by a thrifty class of farmers. The northern portion of the county where irrigation is not possible, is largely taken up by cattle and sheep ranches.

The production of gold last year exceeded a million and a half dollars and the present year will show a material increase over last. This production makes it the banner gold producing county of the state; indeed, if the gold produced as a byproduct of the copper ores of Butte is omitted from the computation. Lewis and Clarke produces almost one-half of the entire gold output of the state. The application of modern methods of concentration and treatment by cyanide is very rapidly increasing the gold production of this county. While the production of this county is large, it is but a tithe of what may be expected when thousands of promising surface prospects are developed. The most development in the mines has been made at Marysville and in the Red Mountain country, in the vicinity of Rimini, and on the Belt mountains at York, and these districts are really but scratched on the surface. During the last ten years since the depression in the price of silver, the attention of mining men and prospectors from all over the state have been directed to the gold deposits of this county, and the result of this systematic search is plainly shown in the rapid increase of production and the location of a large number of new claims. The presence of a large mining population of course furnishes a large and increasing local market for all of the products of the soil. The supply of agricultural products by no means equals the demand of the local market, and that at a price which would make the eastern farmer green with envy.

The short distance to the local markets at the mining camps and Helena, permit the farmer in most instances to haul his own produce by wagon to market, with a consequent saving in freight and commission charges, which amount to a very substantial yearly profit.

Lewis and Clarke county is remarkably well watered, lying as it does, in a long strip along the eastern slope of the Rocky mountains; numerous



streams that are fed by the snow in these mountains cross the country nearly at right angles and run into the Missouri river, other streams having their head waters in the Belt mountains flow to the west into the Missouri river. The most notable streams in Lewis and Clarke county are the Missouri river, the Little and Big Prickly Pear, Wolf Creek, Dearborn, North South and Middle Fork, Sun river, and the Big Blackfoot, with its two branches. These streams furnish ample water at all seasons of the year for irrigation purposes, and running with rapid fall to the rivers, but short and inexpensive canals are necessary to utilize their waters.



MAIN STREET—HELENA.

Lewis and Clarke county is most advantageously situated with reference to the rest of the state and the conformation of the mountains and streams is such, that all lines of railroad seeking an entrance to the mines or on their route to the Pacific necessarily pass through this county and furnish convenient and easy communication with the rest of the world. It was no mere accident that the successive expeditions that explored the north-west long before the days of the railroad passed through this country on their route to the coast. The direction of the streams and trend of the mountain ranges make this county the highway from the east to the west and

from the north to the south. The railroads passing through the county followed the routes of the explorers.

This county is centrally located between the mineral country of the south and west and the agricultural country of the north and east, making it a convenient meeting point for the farmers, cattle and sheep raisers, and the miners. Long before the days of the railroad the city of Helena was the distributing center for the placer camps of the state, and now that the railroads have come, it is still the distributing center. Helena has been



BROADWATER HOTEL—HELENA.

the capital of the state for many years, and has gradually collected from all over the state a class of inhabitants who, coming here either as state officers, or having business connected with the state, have become attached to the city, and have made it their permanent home, forming a class of residents who are especially desirable from an intellectual and social standpoint.

The population of Helena is 10,772. This does not include a suburban population of several thousand. The town is remarkably well built, and for its size, can boast of as handsome business buildings and as attractive and well appointed residences, and all the urban facilities, such as gas, electric lights, street cars, theaters, as well as business establishments in all lines of trade as in cities of the Mississippi of 100,000 people.

The rapid growth of the silver-lead smelter at Helena and its continued enlargement under each successive management, is proof that Helena is an



especially favorable location for this business. It is located in the center of the most prolific dry ore producing district of the northwest, and by means of the Northern Pacific railroad has close connection with the Coeur D'Alenes in Idaho, the largest wet ore producing district in the northwest. The fuel supply that is available from both railroads, over the Great Northern from the north and Northern Pacific from the east, makes fuel for the smelters



BROADWAY—HELENA.

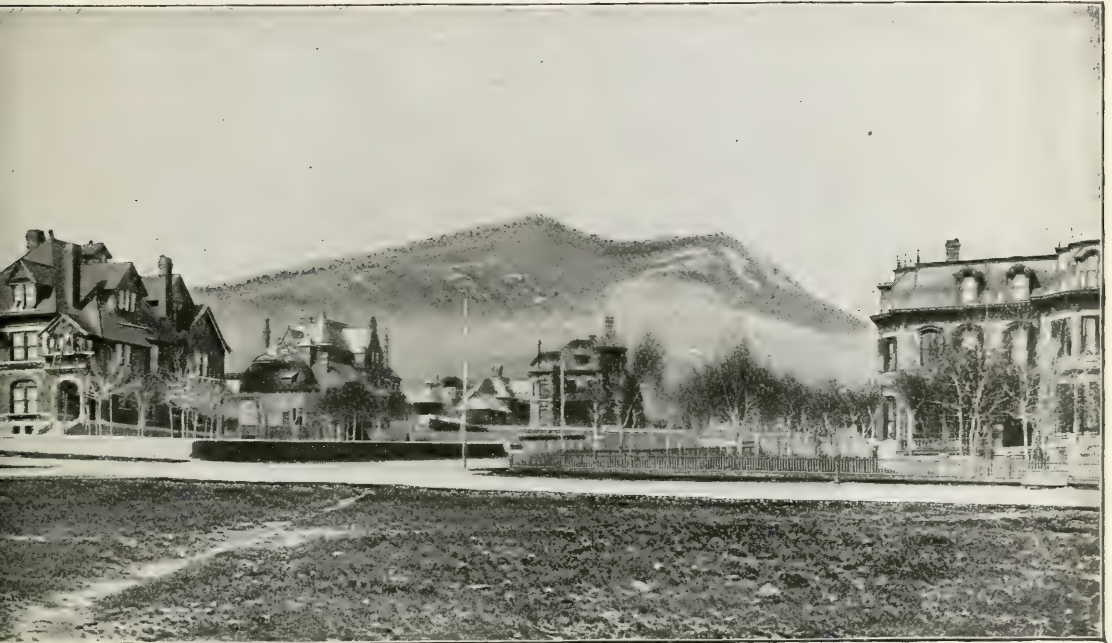
abundant, easy to obtain and cheap. The recent development of the electric power at the Missouri river, which has cost up to date over a million dollars, makes available 20,000 horse power which is used to generate electric power, and is transmitted by cable to the smelters and the city, furnishing motive power at as low cost as anywhere in the United States. This combination of natural smelting and refining advantages will certainly attract other plants. While the lands of this county are fairly well occupied, there are numerous opportunities for additional settlers on the public and railroad lands of the county. The present farmers are prosperous, but in most instances have too large an area to farm to the best advantage. Eastern farmers who are accustomed to smaller areas of land can purchase from the present owners and make handsome profits with the more intense methods of farming. The



local demand in Helena and at mining camps will always consume at high price more than the lands of the county can possibly produce.

The system of schools in Helena, both public and private, is not surpassed anywhere in the country.

A description of Lewis and Clarke county would be incomplete without a chapter devoted to its county seat and chief city. The capital of Montana is a gradual growth composed of the best elements from all over the state. It is an evolution from the Mining camp which was started in Last Chance gulch by the discovery of gold in 1884, and after these placers were exhausted, it grew because of its central location at the meeting of the trade routes that



MOUNT HELENA IN THE BACKGROUND.

traverse Montana from the north to the south and from the east to the west. It is the oldest city in the state, and during the thirty-six years of its existence it has naturally attracted to it a large portion of the most substantial people in the state, who have come for the purpose of educating their children, and for the social and other advantages obtainable at centrally located cities. Helena is universally conceded by all who visit it that it is the best built and most metropolitan of any place of its size, or of many times its size west of the Mississippi river. It is in every sense of the word a city, and possesses all of those urban facilities usually found in the large eastern cities. The location is of the most picturesque, and is protected by the mountains from the winds of every compass point. Its location on the slope of the mountain and on the edge of the beautiful valley is from a scenic and hygienic standpoint everything that could be desired. Its irregularity of contour and consequent avoidance of the straight lines so common in American cities makes it the more picturesque and attractive.

The officers of the United States army, in pursuance of the policy to con-

concentrate troops at central points from which detachments can be most quickly and most easily moved to any given point, have built a central regimental post at Helena. Having a thorough knowledge of the country, and not moved by any sentimental notions, the selection of Helena for a post of this sort may fairly be accepted as a stamp of approval by the highest military authority that this is the natural distributing point of the state.

A circle drawn upon the map with Helena in the center and a radius of seventy-five miles will include within its limits a section of country that has produced one thousand millions in the precious and semi-precious metals within a third of a century. The minerals that go to make up this vast sum

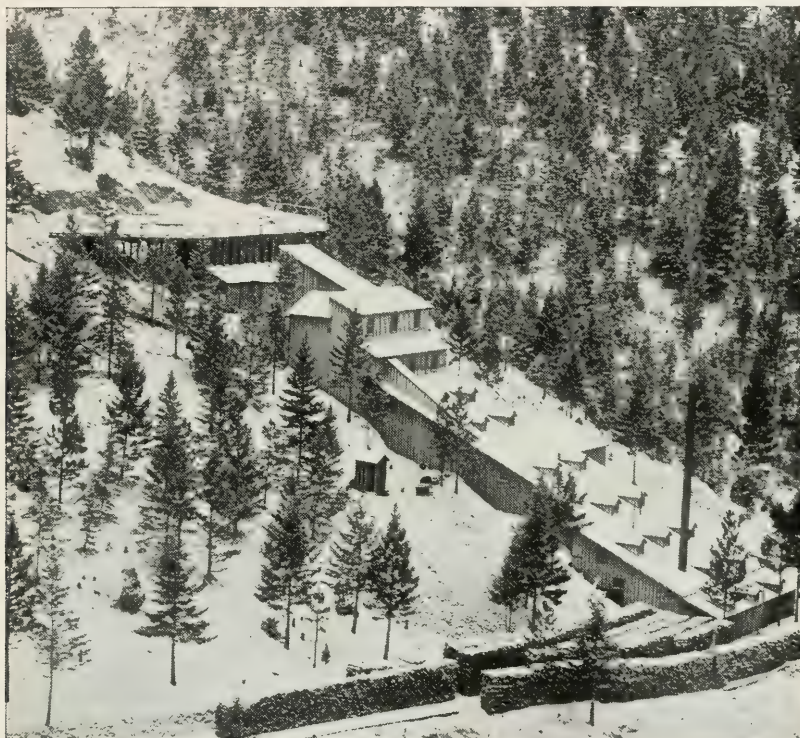


POWER BLOCK—HELENA.

have heretofore been precious metals, but in addition almost every valuable mineral known is found within this circle. \* The production noted is increasing at the rate of from ten to fifteen million a year. The branch and main line of railways from every portion of this mineral field have down grade hauls to the city, making it possible to smelt ores from the surrounding mines with the greatest advantage. Helena is in the center of the dry ore field, at the most convenient point accessible to the Coeur D'Alenes in Idaho, the largest and best supply of lead ore in the United States. Fuel for smelting is delivered at Helena at as low a cost as at any other point in the northwest. The best evidence of the importance of the place as a smelting center is found in the plant at East Helena, which was started ten years ago with a capacity of one hundred and fifty tons, making it one of the largest and most complete plants in the state. All the lead smelters in the United



States, including the one at East Helena, are owned by the American Smelting & Refining Co. The plant at East Helena was the one selected by this concern for doubling its capacity, which was done during the past year. Owning plants located all over the United States, the fact that they should have selected this one for such material enlargement in preference to any other of their plants is conclusive proof of the many advantages for mineral reduction that are obtainable here. The construction of the Missouri river dam is further evidence of the opinion of smelting men as to the advantages Helena offers as a smelting point.



A GOLD MILL.

Next to the big electrical plant at Niagara, the one now installed on the Missouri river at Helena will, when the new additions to it now under construction are completed, be the most complete and extensive plant for the long distance transmission of electricity in operation in the country. No expense has been spared by the owners of this plant to have it complete and economical in every detail. The capacity of the present dam is already taxed, and another one is in contemplation. Numerous sites exist in the canyon of the Missouri river near where other dams can be built and the supply of power from the swift-flowing river made practically unlimited.

Intending manufacturers seeking a location in the state will find it to their interest to examine the openings presented in Helena. Many forms of manufacturing are already represented, all of them having started in a modest way, and are growing to importance. There are two large breweries



that ship their goods all over the state, a large concern making common and ornamental brick, fire brick, sewer pipe, drain tile, etc., that employs one hundred and twenty-five men. These goods are shipped all over Montana and the adjoining states. A large cracker and candy factory and several smaller establishments make candy. Several planing mills, sash, door and blind factories, large foundry and machine shops, a soap and candle factory. In addition to these there are numerous small manufacturing industries that



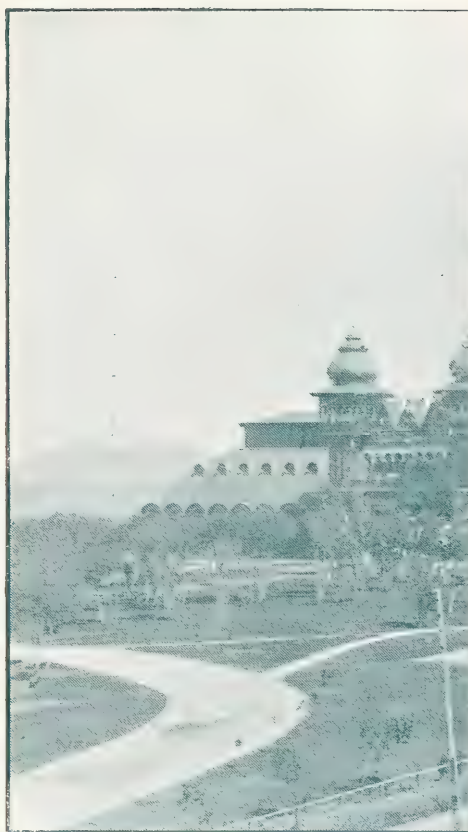
A HELENA BUSINESS BUILDING.

in the aggregate employ a large number of people. These smaller industries are growing rapidly, and others are being added; several during the past year.

The system of schools, both private and public in Helena, are said by educational experts to be equal, if not superior, to those of any place in the west. No expense or pains are spared by the public spirited men who compose the school board to advance the standard and character of the schools.

The business buildings of the city are not surpassed at any place in the west, and the concerns that occupy them are certainly equal to those in eastern cities of many times its population. The same is true of the hotels, of which there are all grades.

Out



BROADV



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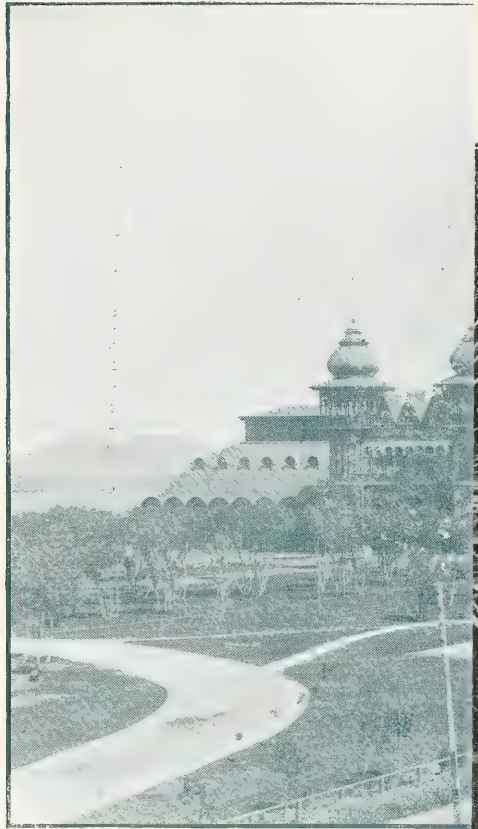
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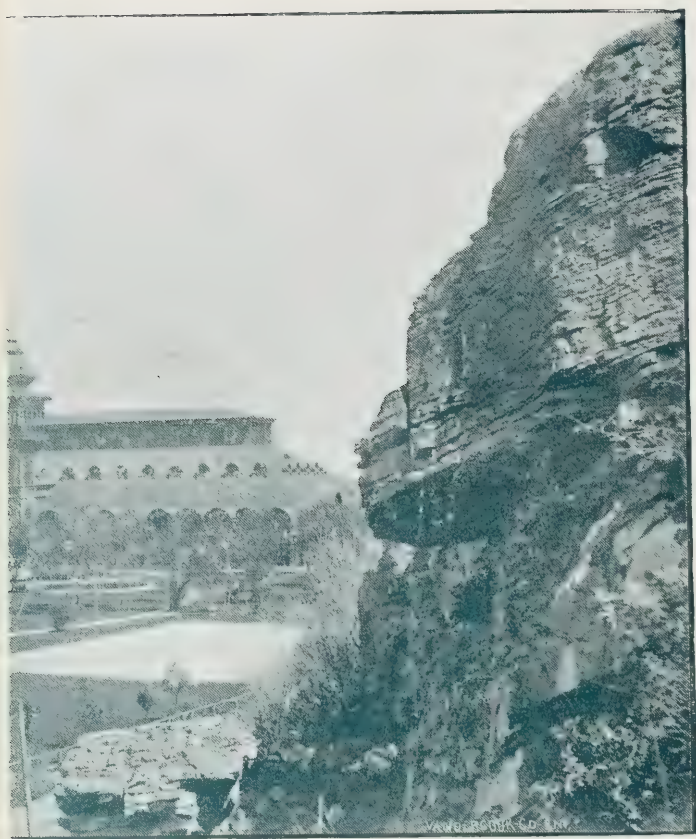
The business buildings of the city are not surpassed at any place in the west, and the concerns that occupy them are certainly equal to those in eastern cities of many times its population. The same is true of the hotels, of which there are all grades.





BROADV





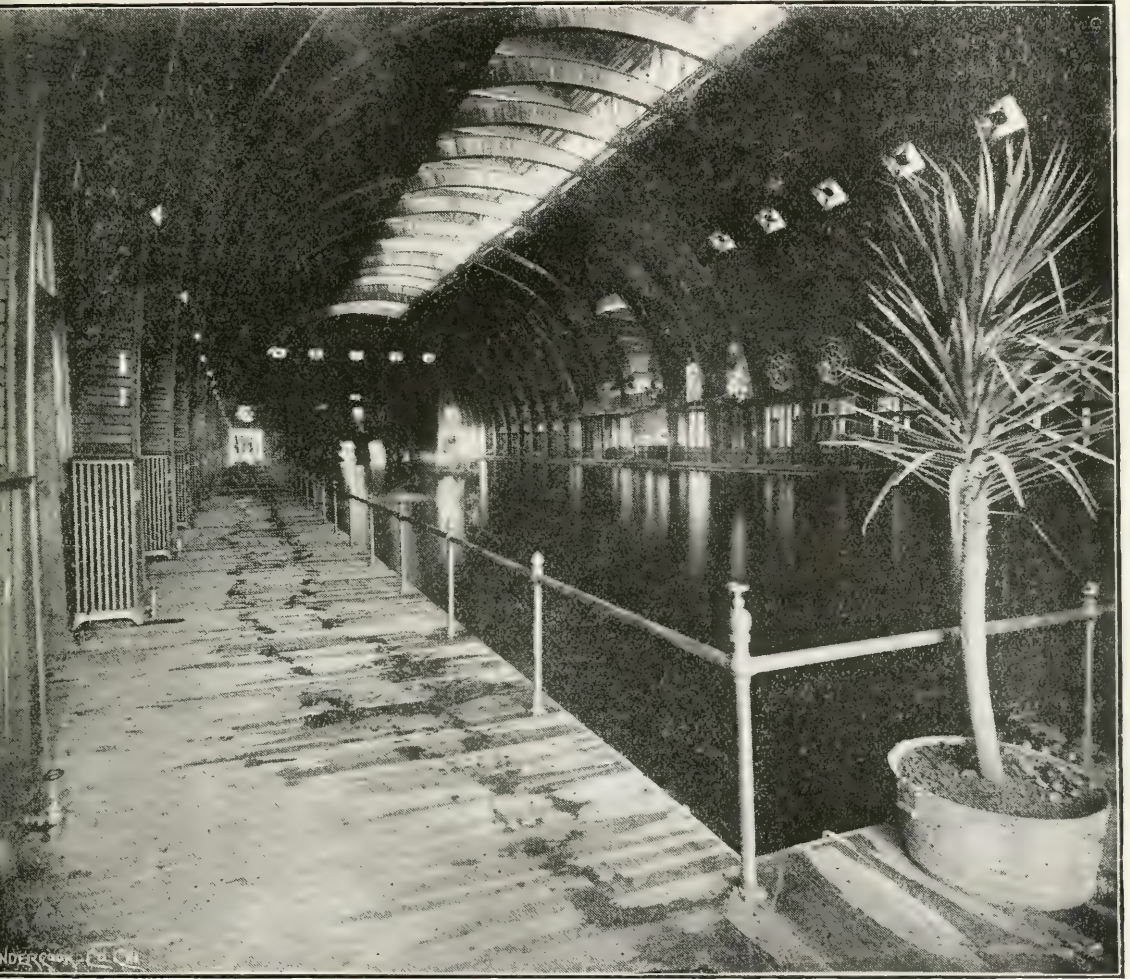
WATER NATATORIUM—HELENA.



EAST HELENA SMELTER.



The big plunge bath at the Broadwater hot springs is three hundred and fifty feet in length and one hundred and fifty feet in width. It is one of the largest and best appointed bathing pools in this country. It is supplied with natural hot water, delivered at a temperature of one hundred and seventy degrees, and with the necessary cold water to temper it. The hotel in connection with it is also magnificently appointed, and the grounds sur-



INTERIOR VIEW BROADWATER NATATORIUM—HELENA.

rounding both buildings are everything that could be desired. This resort is located two and a half miles west of the city, with two electric street car lines affording rapid and easy communication. Another hot spring and most attractive resort is at Alhambra, twelve miles south of the city, where there is a picturesque and comfortable hotel, with plunge and private bath. This resort is of easy access by the daily trains of the Northern Pacific and Great Northern railways. These resorts are destined in time to attract many health seekers who wish to take advantage of the bright sunshine, the perfect climate of Montana, and the medicinal properties of the thermal waters.



Without attempting to describe at length the residences of the city, it is sufficient to say that in keeping with the business buildings, the residences are largely of brick and stone. Many of them would be a credit to the aristocratic avenues of any of the eastern cities. It is universally conceded that in this respect Helena has more attractions than any other city between St. Paul and Portland.



PENSTOCKS OF THE HELENA DAM.

The whole world is engaged in a mad scramble for gold, and those regions able to make a showing in the production of gold are most interesting to investors. Lewis and Clarke county is emphatically a gold producing region, and since the discovery of gold here in 1863, the total production has been over sixty millions of dollars. The increase in gold production from the quartz mines since the panic of 1893 has been steady and rapid, and the production for 1900 will exceed \$1,800,000. This is more than half of the entire gold output of the state, outside of Butte, where about a million and a quarter of gold is saved as a by-product of copper ores. This makes Lewis and Clarke the banner gold-producing county of Montana and the northwest. The production of this county exceeded the production of either Washington, Idaho or Oregon. The gold-bearing belt in Lewis and Clarke county extends from its southeastern corner to the south of the city of Helena, and thence in a wide semi-circle through Marysville, Bald Butte, to the northwest corner

of the county. This belt, or mother lode, it might be called, is several miles in width, and everywhere that systematic development has been undertaken mines of value have resulted. The deepest development is about the mining camp of Marysville, located eighteen miles northwest of Helena, on a spur of the main range. The principal mine in Marysville is the Drum Lumnon, which was purchased a number of years ago from its discoverer, Thomas Cruse, by the Montana Mining company, limited, an English corporation. This mine has been producing steadily for nearly twenty years, and during that time it has produced upwards of nineteen million dollars. The equipment consists of two well appointed stamp mills, one of sixty and the other



PROPOSED FEDERAL BUILDING—HELENA.

of fifty stamps. This mine has been the mainstay of Marysville camp, and supports a town of about 1,500 people, equipped with electric lights, water, etc. About three years ago this company built a large cyanide plant with a narrow gauge railroad five miles in length, for the purpose of treating the tailings from their quartz mills which had been accumulated in dams along Silver creek. This plant has a daily capacity of 400 tons. It has been in continuous operation, and the company is making a very handsome profit from the treatment of the waste of previous millings.

About three years ago Col. Thomas Cruse, of Helena, commenced to develop what is known as the Cruse and Bald Mountain Mining Claims, adjoining the Montana Mining company's properties. He built a twenty-stamp mill, with cyanide attachment, and it is now one of the big producers in Marysville.

A short distance from Marysville is the Belmont mine, for a number of

years a big producer, and then was closed down and lay idle until two years ago, when it was put in operation by the Penobscot Mining company. They reopened the Belmont, equipping the mill with cyanide to treat the tailings after the free gold has been extracted, and the result of this modern process is another big gold producer. The other mines in the vicinity of Marysville that are producers are the St. Louis Mining company, the Big Ox Mining company, the Empire, the Gloster, the Bell Boy, the Pegan and the Jerusha.

About twenty miles to the northwest of Marysville is the Bald Butte mine. This is the biggest producer today in Lewis and Clarke county, it



GOVERNMENT ASSAY OFFICES—HELENA.

having paid during the year 3 per cent, and for the last four months of the year 6 per cent a month in dividends. A rich strike of a parallel vein was recently made in this mine, the assays of the ore running as high as \$7,500 per ton, while the average value ascertained by mill runs was about \$100 per ton. This mine is equipped with a forty-stamp mill, and every labor-saving and modern device in gold saving. The dividend record of the Bald Butte, which has been a continuous one for about ten years, is now upwards of a million dollars. A short distance from the Bald Butte are a number of mining claims that are being developed, and from time to time shipments are made.



There are to the north and northwest of Marysville thousands of undeveloped prospects that are being developed by their owners, and many of these will eventually become paying mines. To the northeast of Bald Butte is located the Stemple gold district, and the Jay Gould is further to the north. The Jay Gould mine has produced a million and a half dollars. To the northwest and on the western slope of the main range of the Rockies



COUNTY COURT HOUSE—HELENA.

there are a number of good surface showings of gold ore, and in the extreme western portion of Lewis and Clarke county there is a copper camp that has a very promising future. High grade ore is being shipped to the railroad, but the distance and expense of the long wagon haul prevents extensive shipments for the present. When the mines are developed sufficiently to warrant the extension of one of the railroads into that section, the camp will become a prominent producer.

Southwest of Helena is what is known as the Red Mountain district. This district is located at the head of Ten Mile creek, and is connected by twenty miles of railroad from Helena to Rimini. The ore is uniformly a base combination gold, silver, copper and lead. At times veins of very high grade ore that will bear the expense of shipment are found, but the



LOOKING UP NEW YORK GULCH.

larger proportion of the ores in the district are of low grade, requiring concentration before shipment. Since the commercial concentrator was built at East Helena, affording an opportunity to treat the ore with profit, the district has experienced an energetic and warranted revival.

Beyond Rimini and on the summit of the main range at the head of Ten Mile creek, laying along the main divide of the Rockies, is one of the largest deposits of free milling gold in the United States. This is called the Porphry Dike. It is a mile wide and three-fourths of a mile in length. Seventy

thousand tons of this ore have been milled in small and poorly equipped stamp mills, and an average saving effected of \$2.60 per ton net. One of the largest mines in the country makes a very large profit out of ore that only averages \$2.06 per ton. The ownership of the Porphyry Dike has during the last year been consolidated into the hands of three mining men of ripe experience and very large capital. They have purchased the properties with the view of erecting mills of large capacity, and it is probable that the plant will be located in the valley below Helena.

To the south of Helena and to the east extending over into Jefferson county is another part of this gold district in which many discoveries of very high grade ore have been made. Development is confined to surface workings. Large bodies of low grade ore also exist, but the average prospector is unable to work them.

Just south of Helena there is a property called the Winscott, where a ten-stamp mill has been in operation for years; treating the ore from what is literally a mountain of ore. The deposit so far as developed, exceeds a hundred feet in width, and it is worked as an open quarry. Everything for the entire 100 feet and the corresponding distance in height is quarried and taken to the mill. The average of this ore is \$4.00 per ton. To the north and east of Helena along the Missouri river in all of the gulches that lead down from the belt range, are many quartz ledges that are worked in a small way, and ore shipped to the smelter at East Helena. A number of small quartz mills are also in operation in these mountains. In the beds and banks of all the creeks that flow through Lewis and Clarke county placer gold was found in paying quantities, and the annual product of these aggregate a large sum.

The application, since the panic, of modern processes for the concentration of ore has materially increased the gold production of this county. There are a number of concentrating mills in operation in addition to the large commercial concentrator at East Helena, which is treating ores from all over the state. The application of cyanide treatment or the leaching of gold from crushed ore by solution of cyanide has been applied to a dozen mines in the county during the last couple of years, and has greatly added to the output of the district.

A number of discoveries of very rich ore have been made by prospectors recently, the most notable one being that of John Beahm on the head of the Blue Cloud gulch, where he took out \$5,000 in less than a week. The most notable discovery made during the year was the copper discovery on Mount Helena inside the residence district of the city. Two shafts are being sunk on the discoveries. One is being sunk by the manager of the East Helena smelter and some capitalists, and the other by F. August Heinze, of Butte, who has secured a large area of ground and let a contract to sink a double shaft. The astonishing thing about this mineral discovery is that it should be made on ground that has been traveled over for years. Still to the south of town, and practically inside the city limits, the Howard mine has been shipping gold ore that nets as high as \$1,500 per car. In the same vicinity are half a dozen properties, stimulated by the success of the Howard, that are developing steadily and shipping ore from time to time.

It may be said that the mineral portions of this county have scarcely been prospected, and excellent opportunities are presented to men with money, and to those who have only their energy, to make fortunes in the mining business.

There is no section of the state that offers more attractive opportunities to capital and energy than does Lewis and Clarke county.



## Deer Lodge County and Anaconda.

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One of the Richest Mineral Sections of the State—Anaconda, Its Most Prominent City, the Location of the Great Anaconda Copper Refining and Reduction Works.

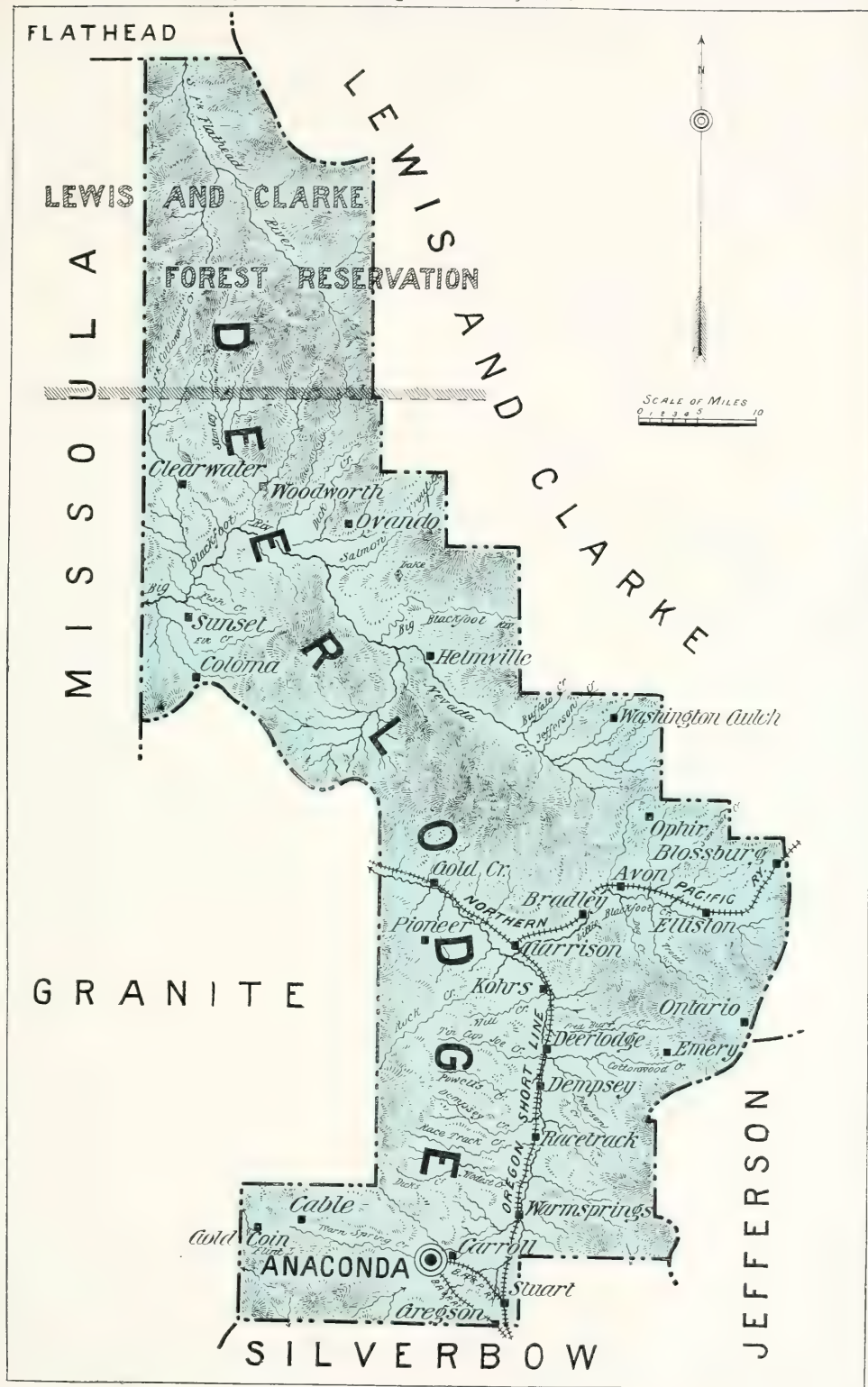
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Deer Lodge is one of the western counties of the state. It is a long, narrow tract of irregular shape, extending lengthwise north and south. Teton, Lewis and Clarke and Jefferson counties bound it on the east, Silver Bow on the south, and Granite, Missoula and Flathead on the west. The county can scarcely be said to have a northern boundary, as in that direction it narrows down to a mere point.

In the early days of Montana's settlement Deer Lodge county was noted for its gold placers. None of them rivaled the marvelous wealth of Alder and Last Chance gulches, but they were numerous, extensive and rich. Those on Gold creek at Bear and Blackfoot were especially valuable. These were among the first, if not the first, of those great placer finds that made Montana famous from the very beginning of her history. The mines at Pioneer, which is on Gold creek, are still being worked with fairly good results. It is not at all improbable that many of these old surface diggings may again be made to yield handsomely and profitably by the introduction of the scientific process of modern dredging now in vogue in Alder gulch, French gulch and other places. Deer Lodge county has also contained some very valuable quartz mines, but the most of these were located in areas that have since been segregated, the great Granite and Bimetallic silver mines, with many millions to their credit, going into Granite county, while the strip taken from the east side and annexed to Lewis and Clarke, contained the rich Bald Butte mine, and many excellent prospects. Hence, Deer Lodge county's mining glory is largely in history. At the same time there is no reason to doubt that the county still contains much mineral wealth, and that systematic development work will prove it. Fine prospects abound in many parts of the county, and several actually paying properties are even now being operated. At Cable, at Georgetown, at Emery, at Ontario, at Ellison, at Helmville, at Coloma and at various points development work is being prosecuted with encouraging outlook, and it is almost certain that many of the properties will yet show great value.

It is not to be supposed, though, that Deer Lodge's mineral wealth is confined to the precious metals and those directly associated with them. Iron also abounds, and there is no doubt that the county contains extensive and valuable deposits of non-metallic minerals, such as coal, marble, fire-clay,

This County has been divided by the present Legislature, creating Powell County, with Deer Lodge the county seat.



#### Assessed Valuations.

Real, \$5,366,710; personal, \$2,011,669; railroads, \$626,554; total, \$8,004,933.





etc. What appears to be a very fine quality of bluish white marble has within the last year or so been discovered about nine miles from Anaconda. When capital shall be invested in the exploitation of these resources, it is certain that they will contribute largely to the permanent future of the county.

Nor is Deer Lodge dependent entirely upon its minerals. Its mountains are well covered with timber, and it has considerable stretches of good agri-



HOTEL MONTANA—ANACONDA.

cultural lands. Its total area is approximately 4,000 square miles, and of this it is estimated that about one-tenth may be available for cultivation, some 200 square miles having already been reclaimed. The arable lands lie chiefly in the valleys of Deer Lodge, Hell Gate, Big Blackfoot and Nevada creeks. Of these Deer Lodge is the largest and most important. It extends from above Stuart nearly to Garrison, and much of it is under a fine state of cultivation. The elevation is considerable, averaging probably more than 4,500 feet, and therefore, in general, it is devoted to the hardier crops, such as hay, barley, oats and vegetables. There is an abundance of water for irrigation, and the cities of Butte and Anaconda furnish ample markets for the products of the farms. It is not strange, therefore, that this fine valley is well filled with good and substantial homes.

The town of Deer Lodge, originally known as "Cottonwood," and formerly the county seat, is located in this valley, about twenty-five miles north of Anaconda.

It is a charming country town, and the locus of the admirably kept state penitentiary, which is under the capable management of Colonel Thomas McTague, with Frank Conley as assistant. A few miles further up the river we come to the Warm Springs Asylum for the Insane, established by Mitchell & Mussigbrod. Here the state's insane are cared for under special contract, private patients being also received for treatment and care. Of this splendid institution Doctor O. I. Warren is the physician in charge, and it is needless to say that it is in good hands.

It is, though, to the city of Anaconda and its immediate vicinity that we must turn to find the business elements and activities which constitute the present greatness of Deer Lodge county. Measured by the magnitude of its industrial operations and the number of men employed, this city is clearly



HEARST LIBRARY—ANACONDA.

the second business center of the state. Here is located the greatest plant in the world for the reduction of copper ores. It is commonly known as the Anaconda smelter, and it is the property of the great Anaconda Copper Mining company. The works consist virtually of four plants, namely the Upper Works, the Refinery, the Lower Works and the Converter. They are located on the north side of the narrow valley, or canyon, in which Anaconda is situated, and beginning just abreast of the lower or easterly end of the city, they extend down the valley in the order named for a distance of nearly two miles. A trip through these works, even for the purpose of a general survey, is a good task for a strong and active person.

The Upper Works and the Lower are of the same general character, and each is a complete plant for the reduction of ore to matte which contains a little more than 50 per cent copper, together with a percentage of gold and silver. Each consists of a concentrator, a roasting or calcining department, and a reverberatory or matte department. The crushing machinery consists of one large Gates crusher and thirteen steam stamps. These are supplemented by rolls and grinding mills for fine work, while the separation of the



richer material in the ore from the poorer is done with Hartz jigs, round Evans tables and Wilfleys. In the calcining departments the concentrates are roasted and a portion of the sulphur expelled. These are equipped with Brueckner revolving furnaces, McDougalls and furnaces of the Wethey type. The Wethey's, however, are only at the Upper Works. The matte departments are provided with reverberatory furnaces, in which the concentrates are melted, and by the expulsion of base material, reduced to the grade of matte.

Originally matte was the finished product of the smelters of this state, and it is yet of many of them. Here, though, the process is carried further, and pure copper is produced. The matte is taken to the converter where by the beautiful pyritic process of purifying, it is reduced to ingot or pig copper, which is about 98 or 98½ per cent fine copper with the usual small percentage of gold and silver. At the converter there are also six blast furnaces which treat certain grades of ore, also producing matte, and this matte is likewise "converted" in the converter furnaces into pig copper. In all of these operations of roasting and melting the sulphur contained in the ores—which are sulphides—is utilized to aid the combustion, thereby greatly reducing the quantity of coal required. As it is, the quantity consumed amounts to 1,200 tons daily. At the converter there is a still further process—that of annealing, whereby the pig copper is put into better condition for refining. Something more than half the product of the converter is thus annealed, cast into anode plates, and in this form sent to the refinery. The remainder is shipped east for refining.

At the refinery the work of separating the gold and silver from the copper and producing the copper in a pure state is done by the electrolytic process. The anode plates are suspended in a solution of sulphuric acid from the positive or anode pole of an electric battery. Opposite to these anode plates and about four or five inches distant in the same solution are hung from the negative or cathode pole of the battery, thin strips of pure copper. The current of electricity being turned on passes first through the anode plates, which are slowly dissolved, converted into a solution of sulphate of copper by union with the acid, and then re-deposited on the cathode strips chemically pure, the gold, silver and other matter contained in the anode plates going to the bottom of the tanks. The precious metals are then separately treated and saved. The metal formed thus on the cathode plates is the pure electrolytic copper of commerce.

The total capacity of these great works is approximately 4,800 tons of crude ore each twenty-four hours. The quantity of copper, silver and gold produced, of course, depends on the richness of the ore. Taking a series of years, it is conservative to place the average copper production at one hundred and ten million pounds annually, and, at the prevailing price of copper, the total value of the product for 1900 cannot have been materially, if any, less than \$23,000,000—it may have exceeded that figure.

The ores from which these enormous values are realized nearly all come from the Anaconda company's mines at Butte, the Anaconda proper now producing the richest of the ores. They are transported by the Butte, Anaconda



& Pacific railway, which also belongs to the company, and has its main office in the city of Anaconda. This is probably the best equipped, busiest and most profitable railroad of its length in the world.

As an adjunct to its mines and smelters should be mentioned the Anaconda company's magnificent foundry, which is located at the lower end of the city, and just across the valley from the Upper Works. This foundry devotes itself primarily to the company's own work, but it also turns out much new machinery, and does a large amount of repairing for other companies and individuals. The plant is thoroughly equipped for all kinds of



COUNTY COURT HOUSE—ANACONDA.

foundry, machine, boiler and blacksmith work, and can turn out almost anything, from a bolt to a steam engine.

The Anaconda company has, in round numbers, 2,100 men regularly employed at the smelters and brick yard; there are about 400 men at the foundry, and some hundreds at the Anaconda end of the railroad. Altogether the company gives regular employment to about 3,000 people, while fully 1,000 more are carried on the pay-roll, and have employment a goodly portion of the time. The monthly pay-roll can scarcely call for less than \$300,000.

The great plant thus hastily sketched has been built piecemeal and represents in the aggregate an investment of perhaps ten million dollars. Beginning when smelting was in its infancy, constant changes have been necessary to bring it up abreast of the times and keep it there. This has been difficult, expensive, and in some respects, not altogether practicable. Millions of dol-

lars have been expended in improving and modernizing the works, and still there is much to be desired. As the different parts were built, it was necessary to string them out lengthwise down the valley, which is an obvious disadvantage, separating the various departments by considerable distances. The science of ore treatment has been making steady progress during recent years, and the only way to have a smelter that is in the strictest sense modern is to build one all at once, in order that all the parts may be in harmonious and close connection. Marcus Daly fully recognized this truth, and for a long time before his death had in contemplation the building of a new smelter which should not only be the largest in existence, but the best of its kind that human skill could devise. Even before Mr. Daly's serious illness began, this great work had been actually set in motion. The Amalgamated Copper company, of which he was the president, had been formed. This company obtained not only control of the Anaconda properties, but those of the Parrot, Colorado, Washoe and Butte and Boston companies, as well as heavy inter-



A BUSINESS STREET—ANACONDA.

ests in others. Anaconda is another advantageous point for the treatment of Butte ores, combining as it does eligible building sites, with abundance of water, and ease of transportation. Accordingly, about a year ago it was finally and definitely decided to build a new smelter on the opposite side of the valley from the old works.

Everything connected with this grand enterprise has been conceived on a magnificent scale. The site is a most commanding one. Just at the mouth of the Warm Springs canyon, or valley, on a bold spur of the mountain which forms the western boundary of the canyon the vast works are being erected, and from this point may be had a most inspiring view of the Deer Lodge valley as it stretches away to the east and north, with its broad expanse of rich fields dotted with comfortable homes. The main buildings are all to be of steel, and they will consist of the concentrator, the roaster, the reverberatory or matte building, the converter and blast furnace building—no refinery



at this time being in contemplation. This will make a complete plant for the production of pig copper which will run about 98½ per cent fine.

A moment's consideration of the dimensions of the main buildings will give a fair idea of the magnitude of this giant of smelters. The concentrator will have a length over all of 625 feet and a width of 349. It will be in two sections with the power house between them. The roaster building is 330 feet long by 98 feet wide; the reverberatory or matte building, 408 feet long by 176 feet wide; the converter 462 feet long by 174 feet wide, and the blast furnace building, 280 feet long by 82 feet wide.

The concentrator building will occupy the highest ground, the ore reaching the bins by means of a spur from the Butte, Anaconda and Pacific railroad. From the concentrator the material will move constantly to lower

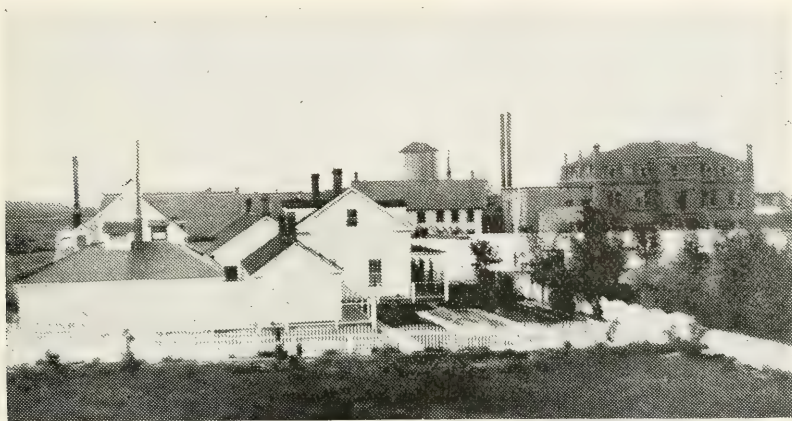


HOSPITAL—WARM SPRINGS.

levels, until the finished product, the pig copper, is ready for shipment from the doors of the converter. Hence, gravity does a vast amount of work that must otherwise have called for steam power and expensive machinery. Some important changes will be made in the machinery, but they will appear less radical than if they had been made two or three years ago; for the changes at the old works have prepared the public, in a measure, for the innovations at the new. For example, the huge steam stamps will be dispensed with entirely, and crushers substituted. But one of the stamps at the old works was torn out nearly a year ago, and a Gates crusher put in its place. Again, at the new smelter, the roasting furnaces will all be of the McDougall type. Four of these, however, have been in successful operation for some time at the upper works of the old plant, and a number of others have recently been installed at the Lower Works. So there will be nothing radically new to the public in the McDougalls. In the matte department the principal change will be in the greater size of the furnaces, although every effort will be made to have them of the very best possible construction. The McDougalls will be



48 in number, each with a daily capacity of fully 50 tons on concentrates—practically 2,500 tons—which will represent 5,000 tons of ore before it is concentrated. And about 5,000 tons is to be the rating of the smelter proper, although the capacity will actually be much greater through the aid of five blast furnaces, which will be capable, in themselves, of reducing 2,000 tons of ore daily to the grade of matte. For these works two power plants will be required, each representing 6,000 horse-power. The stacks will be set high on the hill to effectually carry off the fumes. They will be of steel, self-sustaining, lined with brick, each 200 feet in height and 20 feet in diameter. As necessary incidents to this great plant, special railroad facilities will be required, and for that purpose about seven miles of new tracks must be provided. Water also will be needed in abundance, and to supply this indispensable want a flume four miles in length will connect the works with the



STATE INSANE ASYLUM—WARM SPRINGS.

waters of Warm Springs creek, well up the canyon. It is estimated that these works, in their entirety, will represent an expenditure of from \$5,000,000 to \$6,000,000.

It must not be supposed that this enterprise is merely in prospect. It was, in fact, begun last June, and is now well under way. The roaster and blast furnace buildings are almost finished, the concentrator power-house is in course of erection, and machinery is being installed; the foundations for the concentrator and reverberatory have been commenced, and work will soon be in progress on the buildings themselves. From 400 to 500 men are engaged in this work, besides those employed excavating for the railroad and the water ditch. It is believed that the plant will be entirely finished in the course of a year, and some parts of it may be utilized very much sooner.

It requires no gift of foresight to enable a person of the commonest understanding to see that all of this means many years of increased and increasing prosperity to Anaconda, and consequently to Deer Lodge county. These works are being erected by one of the strongest financial concerns in the United States, and those at the head of it are among America's shrewdest financiers. There can be no doubt that before incurring this extraordinary expense, the most exhaustive inspection was made of the mines constituting

the source of the ore supply, and that the inspection was satisfactory. It is certain that the mines of Butte have a long lease of life before them. This means that as long as the mines of Butte hold out the Anaconda smelters, both new and old, will continue to run, and that relatively more and more of the ores will be treated here. The knowledge of these facts will encourage public spirited men to erect more and better business buildings, more and better homes. With its fine public buildings, its street car service, its electric light and water systems, and with its 10,000 intelligent and energetic people, Anaconda is already a little giant among western cities, but every sign now written on the horizon of the future indicates that its prosperity has but just begun. And as its chief city grows and flourishes, so must Deer Lodge county as a whole share in the benefits, while its people may look forward to still better things as the years come and go.



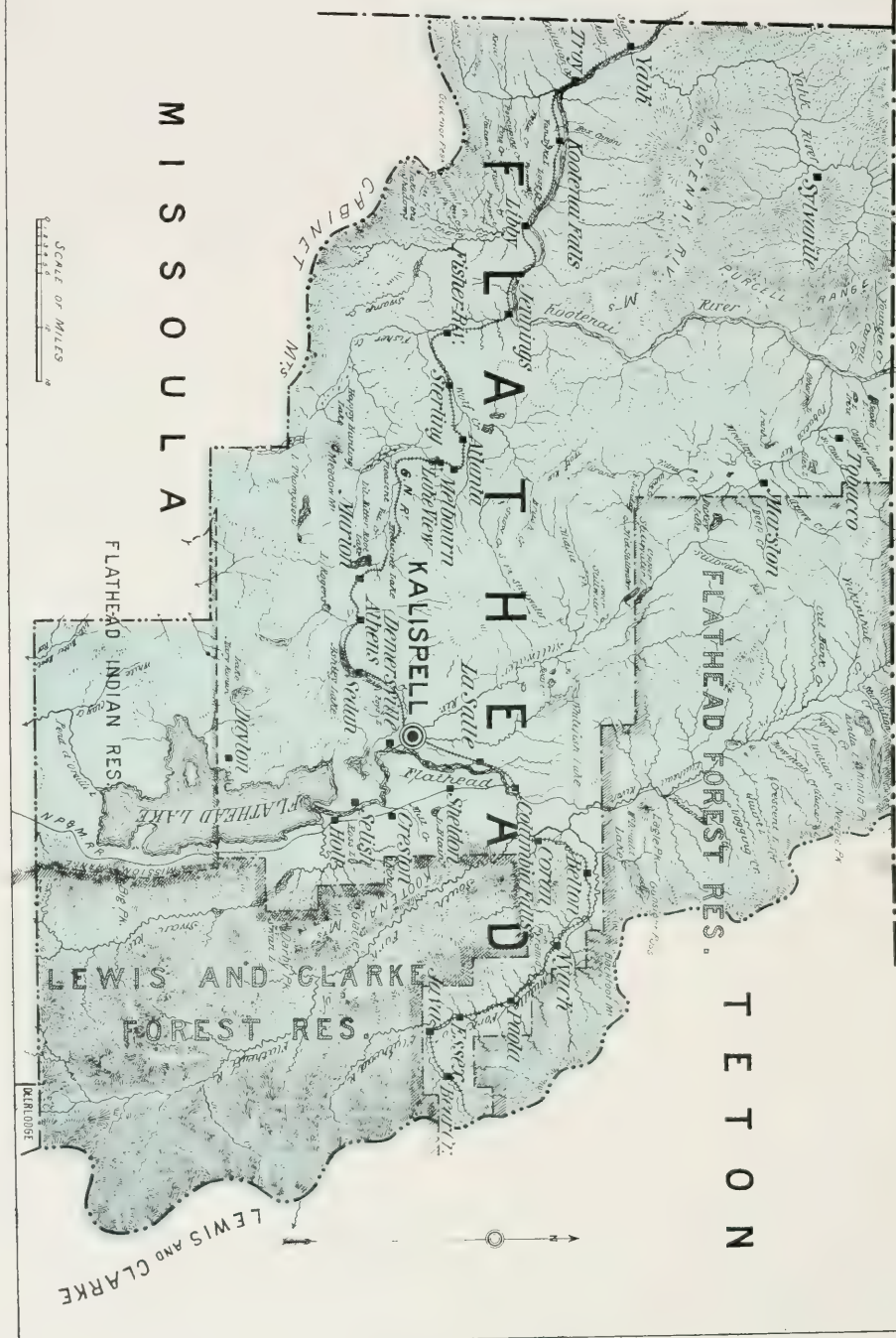
BIRD'S-EYE VIEW DALY RANCH.





# I D A H O

## BRITISH POSSESSIONS



### Assessed Valuations.

Real, \$2,108,905; personal, \$981,406; railroads, \$1,059,258; total, \$4,149,569.

## Flathead County.

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**One of the Most Prolifically Fertile in the State—Its Resources, Agriculture, Horticulture, Lumbering and Mining—Magnificent Scenery—Congenial Climate—The Hunter's Paradise—Its Future Assured, and Its Possibilities Almost Unrivaled.**

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In the northwest corner of Montana and west of the Rocky mountains lies the new county of Flathead, having an area of 8,700 square miles, greater than Connecticut, Delaware and Rhode Island combined. With the present population, each inhabitant could occupy nearly one square mile, so it is evident that there is ample room for immigration. Six hundred and seventy thousand acres have been surveyed and appropriated, while about four million acres are still unsurveyed.

A large portion of the county is of a hilly and mountainous nature, whose sides are covered with dense forests, principally of pine, fir and tamarack. The prospector is showing that these mountains are richly seamed with gold, silver, copper and lead. Throughout the county are numerous fertile valleys, whose agricultural possibilities are marvelous.

The largest of these valleys, known as the Flathead, is 35 miles in length, with an average width of 15 miles, and its altitude is about 2,900 feet above sea level.

Kalispell, the county seat of Flathead county, has a population of about 3,000, and is beautifully located on the Stillwater river, about five miles north of the northern extremity of Flathead lake. It is a division point on the Great Northern railway, has eight church organizations, graded schools, county high school, two national banks, flour mill, United States land office, electric lights, waterworks, good stores and hotels, two newspapers, one of which is a daily, fire department, and is the supply point for an extensive agricultural, mining and lumber district. There are yet excellent opportunities for farmers, miners and lumber men in the surrounding country. The other towns in the county are Columbia Falls, where the state Soldiers' Home, a popular institution, is located; Libby, Troy, Sylvanite, Dayton, Holt and Tobacco. All are thriving towns and are doing a prosperous business.

Nestled among the mountains, and on the west side of the Rockies, the ranges to the north and east act as barriers against the cold winds, while the passes in the Cabinet range to the west invite the warm breezes from the Pacific coast that temper the climate and precipitate an abundance of moisture, thus insuring excellent crops without the need of irrigation. It is this bountiful supply of moisture which makes its agricultural possibilities

almost unlimited, as it is found that the same phenomenal crops are produced without irrigation as are grown in the Gallatin and Yellowstone valleys under irrigation ditches.

Nine years ago scarcely 2,000 acres of land in this valley were under cultivation; today over 10,000 acres have been turned with the plow, and there still remains a large area of land untouched.

The land is exceedingly rich, being composed of the washings of ages from the great mountain ranges, making a soil similar to that of the best portions of the Mississippi valley.

There are three classes of agricultural lands; the higher bench lands,



which are sandy with gravelly and clay sub-soil, the lower bench lands having a sandy loam from one to three feet in depth with clay sub-soil, and the bottom lands possessing a rich black loam with clay sub-soil.

Seeding commences about the first of April, and harvesting the first of August. One of the principal crops is hard wheat, rivaling that raised in the famous Red River valley of North Dakota. The yield is from 25 to 40 bushels per acre, and the surplus which our local flour mills do not use, is sought for by the mills of other cities of Montana. Oats, barley and rye are grown with proportionate results. Flax, timothy, millet, alfalfa, tobacco and clover are raised with great success, and the yield surprises the farmers who come from the east.

We have placed exhibits of our grains and grasses at various state fairs, and have been awarded first premiums over any exhibits of several of the middle states. Average yields per acre are: Hard wheat, 31 bushels; oats, 64 bushels; barley, 39 bushels; rye, 30 bushels; potatoes, 257 bushels; tim-



othy,  $2\frac{1}{2}$  tons. All kinds of vegetables and root crops grow large and produce abundantly.

Besides timothy, alfalfa, red, alsike and white clovers and brome grass, orchard grass, blue grass and red top produce heavy crops. Rutebagas and turnips weigh from 20 to 30 pounds each, and all root crops in proportion. Rape and rape seed are being grown with fine success.

The government weather bureau at Kalispell reports an average rainfall of 19.56 inches.

Fruit raising is not yet a standard resource, as the country is too new to



A PRODUCT OF THE VALLEY.

have any extensive orchards, but it is beyond the experimental stage, and in a few years will be vieing with the Bitter Root valley in shipping fruit superior to that of the Pacific coast states.

There are about 1,000 bearing fruit trees of mixed varieties set out about 8 or 12 years ago, 5,000 young trees just coming into bearing, and 90,000 trees have been set out in the past four years.

Apples, pears, plums, cherries, also the small fruits, such as raspberries, strawberries, currants, etc., bear most prolifically.

On the Fourth of July for several years past prizes have been awarded to the party bringing in the greatest variety of flowers and grasses, and one party brought in 203 varieties of flowers and grasses.

Fuel, fencing and lumber, which are great items of expense in the prairie states, are here obtained for the mere labor of cutting and hauling.

Our farmers find the raising of dairy herds, hogs and poultry a substantial source of profit, as the mining camps throughout the state offer a ready and steady market.

Among the most pleasing features to a settler coming from the east are

the 24 school houses and 16 churches throughout the valley, which speak plainly of a law-abiding and civilized community. Kalispell (the new county seat) and Columbia Falls are the important towns and shipping points in the valley.

In the Tobacco Plain country, which lies about 90 miles northwest of Kalispell, there are several townships of rolling prairie grazing and timber land. Along the Kootenai, Fisher, Libby and Yahk rivers, also the smaller streams emptying into the same throughout the western part of the county, there are tracts of fine meadow and park like lands.

The latter when cleared of their fine commercial timber will make rich agricultural lands, and in that respect differ greatly from the prevailing condition of the pine lands in Michigan and Wisconsin, for a great portion of our timber land when cleared is well adapted for agricultural purposes.

The pronounced timber area is 60 by 100 miles in dimension, and logs are easily brought to the sawmills or the railroad by the numerous streams and rivers which abound throughout the county. The timber is white pine, yellow pine, tamarack, fir, cedar, spruce, birch and cottonwood. Twenty sawmills are now at work converting a small part of this immense resource into a means of wealth.

The output at present is 50,000,000 feet per annum, and increasing each year.

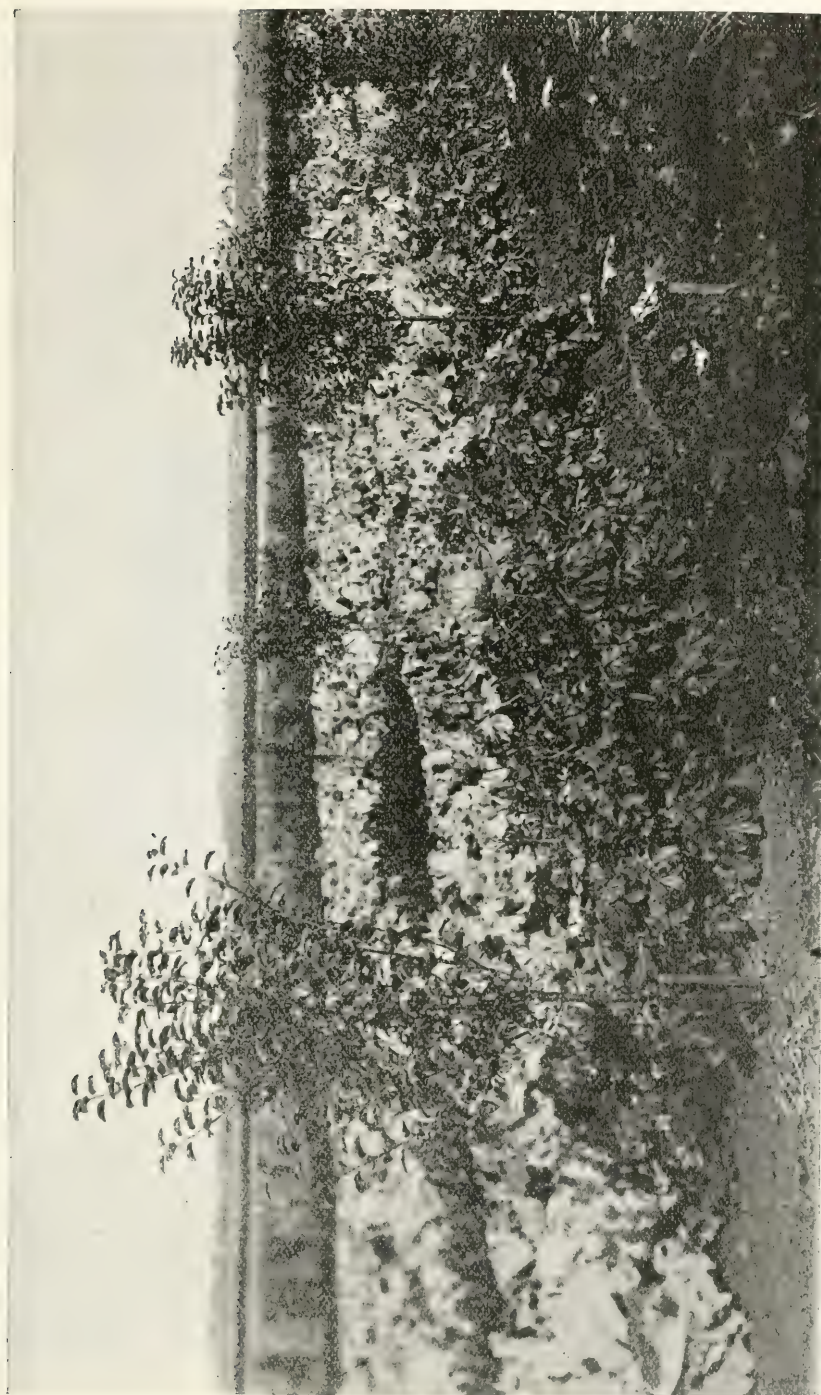
In the northern and eastern portion of the county are hidden great measures of a splendid quality of lignite coal as yet undeveloped. Adjoining these coal fields are tracts of oil lands and positive indications of natural gas.

From the Tobacco Plains country the Kootenai river flows southerly some 50 miles, then turns and flows westerly 40 miles, where it enters into the state of Idaho. In this short distance the Kootenai receives as tributary streams Fisher river at Jennings, Libby creek at Libby, and Lake and Callahan creeks and the Yahk river near Troy, thus draining an immense area of mountainous timbered country. On Fisher river is located an extensive group of gold bearing quartz mines only partially developed as yet, but giving rich promise.

The mines of the Libby district are almost situated on a contact between a slate and quartzite formation which begins about five miles southwest of the town of Libby, and has been developed for a distance of 20 miles. The veins vary in width from five to six feet, and the ore is Galena, which, though not high grade, is worked at a profit at present prices. The most prominent mines in this district are the Shaughnessy Hill, Silver Cable and Snow Shoe groups. The last mentioned group is owned by an English syndicate that has expended over \$300,000.00 on the property, which is now in successful operation.

Within a radius of 25 miles of Troy there are five mining camps, all connected with that town by wagon roads. The principal mines are the Bull river and Bull Lake copper groups, the Rouse Mountain Silver group of some 40 claims, the Banner Mountain group, including the well known Banner & Bangle and the Big Eight Hour Silver Lead mines. There are paying placer gold diggings on Callahan creek, Yahk river, Moyea river and Kootenai river.





A YOUNG ORCHARD IN FLATHEAD COUNTY.



The government prairie land in the Flathead valley proper is all taken up, but by going into outlying portions of the county, prairie, meadow and timber lands can be found for settlement.

In the county, as shown above, there is room for several hundred settlers on government and unsurveyed meadow and timber land.

In the winter the thermometer ranges from 10 to 40 degrees above zero, and we only have an occasional cold snap dropping it below. In summer the mercury ranges from 50 to 85 degrees, and seldom goes above 90. The annual precipitation of moisture is about 20 inches.

A ready market for all of our products, grain, hay, produce and fruit, is found in the mining camps of our own state. Aside from what agricultural products are raised in Montana, hundreds of thousands of dollars worth are shipped in from outside of the state to supply the markets of our mining camps and cities, hence, one can readily see that a home market for the farmer will always be available.

This county, with its moderate climate, bracing air, the abundance of purest water found in springs, streams, rivers and lakes abounding throughout the county, as in Northern Minnesota, the luxuriant growth of grasses and clovers, and the perfect combination of forest and prairie, makes this country one especially adapted to the raising of dairy and beef cattle, draft-horses and trotting stock, sheep and hogs.

The eastern portion of Flathead county is made up of the main range of the Rocky mountains, and contains a combination of mountain scenery, glaciers, lakes and sylvan forests unsurpassed on this continent, affording the tourist an opportunity to feast the eye and soul upon the beauty and grandeur of nature, and the sportsman a chance for magnificent trout fishing in the mountain streams and lakes, and the hunting of ducks, geese, pheasants, grouse and larger game, such as deer, elk, bear, mountain sheep and mountain goat. For a person with energy, pluck and ambition, no better country can be found than that of Flathead, as with these qualifications, combined with the natural resources of the country, success is sure to follow. A farmer with from three to five thousand dollars can purchase and equip a quarter section of the best land, which will yield him returns of from 25 to 50 per cent per annum on his investment. Several instances could be quoted where farmers in the past three years have made from \$2,000 to \$10,000 each, and the deposits in the banks are ample evidence of the prosperity of the farming community.

The already large lumber business of the county has been given a new impetus by the installing of a large plant here by the John O'Brien Lumber company, which has already contracted for 30,000,000 feet of timber. Just now the company is building a railroad from Kalispell to the location of their mills near Flathead lake. According to present plans, the saw mill will have a capacity of 300,000 feet for every 24 hours. This will give Flathead lake the largest lumber output in the state. The railroad is twelve miles long, and has been built entirely by contract; that will also be true of the cutting of logs. During the winter the contractors who cut logs will employ not less than 700 men in the woods, and possibly 1,000.

The managers of the mill assert that the quality of the timber tributary to their mill is of the best quality, and that it will last for many years.

The Great Northern railway company has discovered a chemical treatment for ties that will make them endure for thirty instead of ten years, and will erect a plant at Kalispell the coming year for the treatment of the ties. This will create an added demand for ties from the abundant timber of Flathead county, and will as well contribute to the growth and prosperity of Kalispell.



FLATHEAD FRUIT EXHIBIT.

## Ravalli County and its Resources.    ♪    ♪

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The Bitter Root Valley, One of the Noted Agricultural and Horticultural Localities of the State—Farming, Lumbering and Mining—A Delightful Climate.

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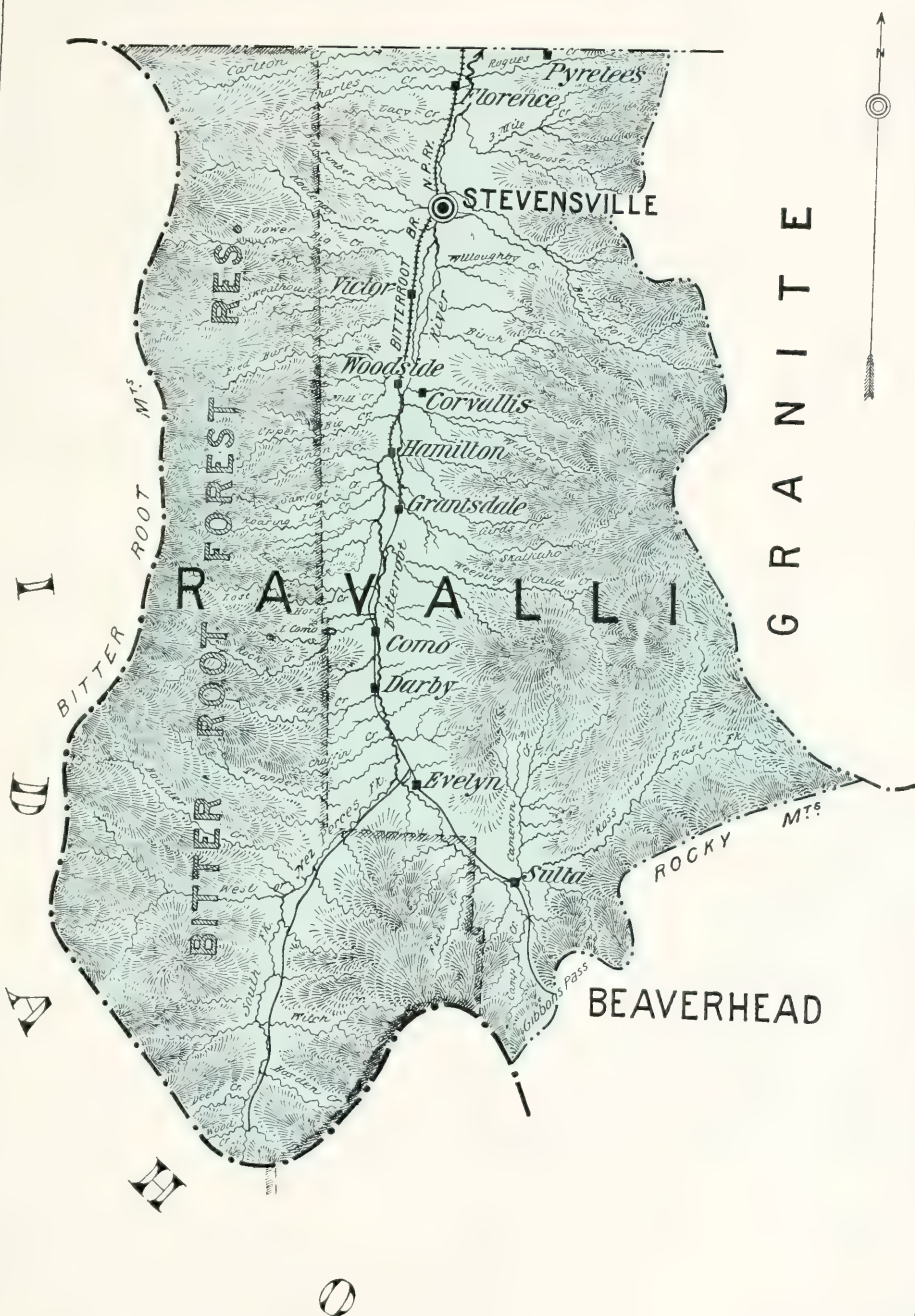
Among the different sections of the state remarkable for their varied attractions, that of the far-famed Bitter Root valley, the paradise of the state, stands unsurpassed. This valley lies in the extreme western portion of the state, and for wealth of field and forest, loveliness of landscape, and fine agricultural and mineral resources, it outranks all other sections of the state.

The valley, which is seventy-five miles in length, and with a varying width of from five to twelve miles, derives its name from the beautiful flower of the Bitter Root, known to botanists as the *Lewisia Rediviva*, which, with its dainty pink petals, makes fields and roadside beautiful in the months of May and June.

Through the midst of the valley, from south to north, winds the noble stream of the Bitter Root, with a large volume of water, fed continually by the crystal mountain streams, whose never-failing source of supply is the eternal snows lying on the summit of the lofty mountains encircling the valley. On every hand, the scenery is magnificent beyond description, defying the utmost power of painter or poet to correctly portray its beauties and grandeur. On the west one beholds the mighty range of the Bitter Root, rising abruptly to a height of ten thousand feet, broken at intervals by the narrow canyons through which course the musical mountain streams. Locked in the granite fastnesses are beautiful parks, and close beneath the icy peaks of the summit are the pellucid waters of many a mountain lake in which are mirrored the images of the strange and beautiful with which they are surrounded, all of which art may seek to imitate, but its only merit will be in its slight resemblance to the real. At the base are forests of gigantic pines; above these lie the great fields of snow that seem but white flecks in the distance, while cascades falling from unseen heights into the dark canyons below seem but silvery threads on the landscape. Towering above and over all are Nature's battlements, hundreds of snowy peaks, either "bathed in the tenderest purple of the distance" or flashing back to the valley the rays of bright sunlight. Everywhere along their sides and summits the aerial tints from the hand of the great Master are as shifting and changeable as the eastern skies at sunset. Take all the songs the immortal singers have sung of Alpine heights



# M I S S O U L A



## Assessed Valuations.

Real, \$1,654,030; personal, \$1,108,300; railroads, \$165,165; total, \$2,927,495.



and they would still fail to reveal the surpassing loveliness of this Bitter Root range.

We look to the east of the valley and find the silvery peaks and pine-clad slopes of the Rockies, bearing in their bosoms myriads of undeveloped mines, their summits strikingly beautiful, ever changing and ever new. And between these great ranges lies the valley teeming with prosperity and gladness, with its hundreds of happy, comfortable homesteads, its flocks and herds, and its fertile, well-cultivated fields, abounding in the choicest fruits, vegetables and grains.



HEAD WATERS CANYON CREEK.

Stevensville was made the county seat, and held the same for six years, and its subsequent removal to Hamilton has not materially affected the growth and prosperity of the town. Situated twenty miles north of Hamilton, on the east side of the river, about one mile from the railway, in the heart of a rich and flourishing fruit and agricultural country, it will continue to stand foremost as a shipping and trading point for farm produce. An historic interest still attaches to the dilapidated walls of Fort Owen and to St. Mary's Mission, adjoining the town, which still stands in a good state of preservation, a memento of the self-sacrificing life work and the burial place of Father Ravalli. The town has a good graded school building, four churches, a large hotel, three general merchandise stores, two drug stores, two hardware and one grocery store, a meat market and three blacksmith shops. It also has a free reading room, two lawyers, two physicians and a newspaper. Substantial new residences are being erected each year, and Stevensville will soon become one of the most desirable residence towns of Western Montana.



GEN. CARRINGTON TREATING WITH THE FLATHEAD INDIANS AT ST. MARY'S MISSION, RAVALLI CO.

Corvallis, another pretty country town, is also situated in the heart of a very rich farming and fruit growing country. It has two first-class general merchandise stores, a fine graded school building, three churches and a number of very fine residences.



Victor, a flourishing little village on the west side of the river, came into existence with the advent of the Bitter Root branch of the Northern Pacific railway in 1888, and is the trading point of a large section, and also the shipping point of the Curlew and Pleasant View mining districts.

Twenty miles south of Hamilton, at the upper end of the valley, is situated the little town of Darby, with immense forests of pine, upon which little impression has yet been made. The town is now the trading center of the farmers of Ross Hole, and the miners of the rich Hughes Creek placer country. With the extension of the railway up the valley, Darby will become a populous and flourishing town.

Grantsdale, the present terminus of the railway in the valley, and Florence, the supply point of the White Cloud mining district, are each good, growing trading towns, with much valuable farming and fruit land in their immediate vicinity.

Hamilton, the metropolis and county seat of Ravalli county, is a beautiful growing town of two thousand inhabitants, situated on the railroad on the east bank of the Bitter Root river, near the center of Ravalli county. The town was laid out in 1890, and afterwards incorporated, and is famed for its beautiful, healthful surroundings, excellent city government, its extensive system of water works, hotels, electric lights, schools and churches; but first of all as the center of the Anaconda Copper Mining company in Western Montana, and for the home and magnificent stock farm of Marcus Daly. The city has enjoyed a steady, substantial growth since its organization, until it has distanced all competitors in the valley, and will continue to be the metropolis and business center of the manufacturing and farming interests of the county. The general growth and prosperity of the town has been primarily due to the efforts of the Anaconda Copper Mining company, which commenced industrial operations in the valley in 1890 under the name of the Bitter Root Development company, with the object of making available for commerce the magnificent timber resources of the valley. For this purpose extensive works have been constructed. A substantial dam has been placed across the swift current of the river, and the lumbering plant of the company comprises a magnificent sawmill, having a capacity of two hundred thousand feet of lumber per day, with all the latest improvements for caring for refuse, and the handling and cutting of logs and lumber, and employing men at good wages the greater part of the year. In connection with the sawmill, there is also a lath-mill, a planing mill and a sash and door factory, from which is turned out both plain and the most artistically carved ornamental work. The logs for the mill come from the vast forests lining the river and the tributaries of its upper course, and to prepare them for the mill an army of men are employed in the logging camps during the winter. The mill pond covers an area of about two hundred acres, and has a capacity of thirty million feet of logs, and a ready market at an advancing price is found in the state for all the lumber cut.

Besides the lumber industry, the Anaconda Copper Mining company carries on an extensive mercantile business. It has here one of the largest and most complete department stores in the northwest, carries in stock a very large stock of hardware, groceries, dry goods, boots and shoes, clothing and

furniture. These great interests of the company are all managed by the most skillful and experienced specialists in their special departments, and conducted on principles of strictest business integrity. Still room has been found for extensive competition in the mercantile business. Besides the company stores, there are also two general merchandise stores, a grocery store, a book store, five fruit and confectionery stores, two clothing stores and three meat markets, all doing an excellent business.

Hamilton has three hotels, including "The Ravalli," which is pronounced to be one of the most elegantly equipped hostels in the northwest. The town is also supplied with a most excellent system of water works, which conducts pure, cool mountain water from Skalkaho creek to the city. Water mains for a city of ten thousand inhabitants have already been laid, and the electric



RAVALLI HOTEL—HAMILTON.

light system is as perfect as that of any city in the state. The town has a fine banking establishment, a modern, up-to-date flouring mill costing twenty thousand dollars, six churches well supported and well attended, two fine public school buildings, with a well equipped high school under the most competent management, three newspapers, six physicians, six lawyers and two dentists. The mills and stock farm give Hamilton a pay-roll of many thousand dollars, monthly, and the town is destined to become distinctly a city of homes. Its beautiful surroundings and extensive improvements have already made it famous, and its further growth and prosperity are assured.

It is true that in the western part of the United States physical conditions similar to those of ancient Egypt and Assyria prevail. The clouds, with gentle showers, are no longer depended upon to fructify the fields. They do not hover over valley and plains, but gather about the giant mountains, hurl their storms against the rocks, and feed the rivers. But truly conquered rivers are better servants than the wild clouds, and through the agency of irrigation, the lands, watered by streams and domed by clear skies, prove the best agricultural lands of the continent. These are the conditions of agriculture in the



A NORTH SIDE SCHOOL HOUSE—HAMILTON.

beautiful Bitter Root valley. Here the necessities for the most perfect, the most vigorous plant life are met in the abundant water and sunshine, and the fields of grain, the orchards and gardens far excel those of the east in luxuriance and productiveness. For twenty-five years there has not been even a partial failure of crops in the Bitter Root valley. Here nature is indeed prodigal. In May and June copious showers descend on the low bottom and alluvial soil in sufficient quantities to assure good crops. On the lighter soils where the gravel comes near the surface, and on the granite lands, where the soil is composed of fine particles of disintegrated granite washed from the mountains, irrigation is necessary for the raising of crops. In the east these lands would be considered useless for agricultural purposes, but when once the water is applied to the arid soil, lo, it blooms as the rose, and the process of irrigation is a very inexpensive one. All the water necessary for the growing crop may be readily obtained by means of lateral ditches, through which the water from the river or the numerous creeks, supplied by the mountain streams, may be directed. Each farmer constructs a ditch for his use from the nearest available stream, or frequently several neighbors may build what is termed a company ditch, large enough to conduct water sufficient for all, and the water from the main ditch is conducted to the land of the individual through the lateral irrigation ditches. These ditches, or the share the individual may have in them, may be sold as a portion of the real estate, so that when a purchaser invests in land, he may also acquire with it sufficient water to irrigate the land for all time to come, and no annual rental is paid for the water. While Montana has not made the progress of other states in the creation of irrigation districts and the laws regulating the use of water, nature has so abundantly supplied this valley with rivers, brooks and lakes that there is very little trouble in securing an adequate supply of water for all necessary purposes. Large canals, miles in length, conveying in the aggregate over thirty thousand miners' inches of water, have already been taken from the river, and hundreds of smaller ditches from the mountain streams cover the high bench lands, where some of the finest crops in the valley are grown. When it is remembered that the great reservoirs in the form of snow on the mountain slopes are inexhaustible, and no matter how long the rain may fail to fall, or with what intensity the sun may send down its rays of burning heat, still the supply of moisture that shall speed the growing crops is unfailing, one realizes what farming in the Bitter Root valley means. Here the economy of nature furnishes not only a constant and perfect supply of sunshine, but by the hand of man comes a constant and perfect supply of water. Here the green of prosperity may never fade into a sickly saffron, nor is the vegetation beaten down by storms or drowned by floods, and there is not an acre of agricultural land in the valley that cannot be made available for crops. An acre of this seemingly worthless land once supplied with water, immediately acquires a value astonishing to men of the east, for it will produce two or threefold the quantity of food for man or beast that an acre will there during the average year. Is it to be wondered then that farming in the valley pays?

The farmers' calling, though proffering no sudden leaps, no ready short cuts to opulence, is the surest of all ways from poverty and want to com-



fort and independence. "Other men must climb; the temperate, frugal, diligent farmer may grow into competence and every external accessory of happiness."

That the soil and climate conditions of this valley are highly favorable to the pursuit of that most independent of all callings, farming, is shown by the success attending the various agricultural experiments that have been made. The diverse character of the soil in different sections thus far has made it im-

possible to determine just what can and what cannot be raised on Bitter Root soil. The last few years have been years of experiment on the part of our most progressive farmers. As a result crops are being raised today that a few years ago would have been considered impossible. It may be said without exaggeration that all crops common to the temperate zone may be grown here, with astonishing results.



LOGGING ON THE BITTER ROOT RIVER.

With proper cultivation and irrigation, wheat will average from thirty to sixty bushels per acre, barley and rye fifty bushels, oats from sixty to one hundred bushels, potatoes from four to six hundred, and many varieties of corn are cultivated with success, while all kinds of garden vegetables grow perfectly and in abundance, and are not excelled in quality or flavor. But while there is much farming on a general scale, the chief attention of the farmer is given to the raising of grain and hay and to orcharding. The valley lands seem particularly adapted to all kinds of grasses. The damp bottom lands make fine hay farms. Timothy yields from two to four tons per acre and grows exceptionally well on the higher lands when irrigated. Finer clover fields than those found in the Bitter Root valley do not exist. Both red and white clover grow anywhere here with a limited amount of water, and do not run out for years. Alfalfa yields enormously, and from two to three crops are cut each year.



Among the most productive branches of farming are dairy-  
ing and raising of poultry. Both constitute a most profitable source of employment in any country, and there are all the elements of success in these lines to be found here, but the field thus far remains comparatively undeveloped,

CONSTRUCTING AN IRRIGATION DAM—RAVALLI CO.

although farmers are gradually paying more attention to it as there is a greater demand for such products at a fair price. With an abundance of nutritious food, cool mountain streams and springs abounding everywhere, and with the improved breeds of dairy stock on nearly every farm, the valley should furnish nearly all the butter required for consumption by the population. With good butter bringing from twenty to thirty cents the entire year, the business proves a paying one, and milk always brings from twenty to thirty cents per gallon. Very little attention has been paid to the making of cheese, the foreign article being found chiefly for sale. Dairying on a large scale could be carried on with the finest success, and good creameries, similar to those in eastern states, would prove a very profitable investment here.

In the valley the raising of poultry has proved a most remunerative pursuit, though until quite recently it did not receive the attention it merited. The dry, invigorating atmosphere and days of continuous sunshine afford conditions extremely favorable to poultry-raising. The market is all that could be desired, as the supply is always inadequate to the demand. Eggs produced from the ranches always bring a higher price than those shipped in from eastern points. The prices usually range from twenty to forty cents per dozen, and there is sufficient profit in the poultry business generally, when rightly conducted, to be an inducement to take it up as an exclusive pursuit. Hitherto the majority of our farmers have directed their attention almost exclusively to the rearing of stock and the raising of grain, so that this small but paying line of farming has received but little attention. The field is a good one with wonderful possibilities for the person who understands the business.

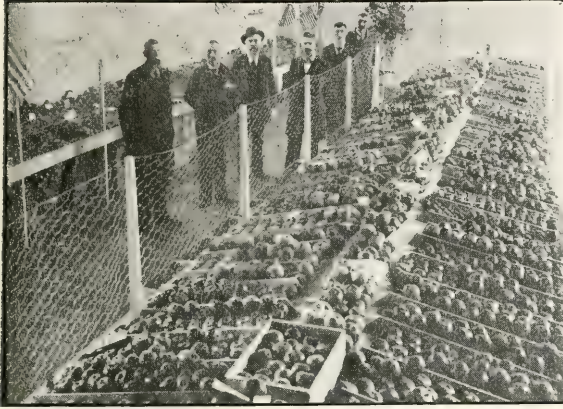
Formerly in Western Montana, and especially in the Bitter Root valley, while it was uncultivated and there was an abundance of native grass, the raising of stock was one of the foremost industries. Even at the present time the foothills of the valley are covered with a luxuriant growth of nutritious bunch grass, which gives an ample pasturage for thousands of head of stock during the entire year with the exception of a few weeks in winter. An excellent market is found for beef and mutton in the state, and the raising of stock has always proved a most lucrative business.

Montana's reputation as the "Treasure State" depends no longer entirely on the immensely rich mines found within her confines. With the astonishing progress made in late years of her resources, she bids fair to become a banner fruit producer of the northwest. Today 13,500 acres of land in the state of Montana are devoted to fruit raising. Of this number six thousand acres are in the Bitter Root valley, which carries the palm in fruit producing, both as to quality and quantity, and the output of apples shipped to the eastern market has been of a nature to surprise the purchaser and delight the producer. Fruit growing is as yet in its infancy in the valley. In 1867, Philip Ritz set out 1,000 fruit trees on the Fort Owen ranch near Stevensville, but they were destroyed by grasshoppers. The next year Thomas Harris planted the first successful orchard in the valley on the farm now owned by May Brothers, who have since become the most extensive fruit growers in the valley, set out one hundred trees shipped to them by mail from Plymouth, Mass., and since that time they have annually set out fruit trees until the Pine



Grove fruit farm is famous throughout the state of Montana, having one hundred acres in fruit and over ten thousand bearing trees. Last year they shipped fourteen cars of apples. The fruit grown in the valley is perfect in every respect, and the market is without limit. Thirty years of experience has demonstrated that fruit culture here is a most profitable enterprise. Only once during all of that time have the trees been seriously damaged by the cold. Land set with Alexander apples twelve years ago is now annually yield-

ing as high as five hundred dollars per acre. No more inviting field is open anywhere to the industrious man with limited capital, than the possession of several acres of land in this valley devoted to fruit culture. Residents of the valley are becoming alive to this fact, and up and down its length one will find, on nearly every farm, thrifty orchards, while many persons have gone into the business on a very extensive scale. The Bitter



BITTER ROOT VALLEY FRUIT EXHIBITION.

Root farm at Hamilton, owned by Marcus Daly, alone has 70,000 fruit trees, many of which are now bearing. Competent judges state that the best apples in the United States are produced here. It was a Bitter Root apple that won the second premium at the recent exposition at Omaha, and it certainly has no superior in size, flavor or keeping qualities. The growing of small fruits also attracts deserved attention at the hands of fruit growers. The strawberry, gooseberry, currant and raspberry are indigenous to the soil and yield abundantly. Hundreds of acres of strawberries are raised in the valley, and a ready market found for them. By means of irrigation the strawberry season is prolonged and from the middle of June until late in August this delightful fruit is found on the market. When the berries from the south and west, from the neighboring states of Utah, Oregon and Washington have long ceased to appear, the Bitter Root berries are still on the market, and the grower of these berries is without a competitor in the markets of the state.



THE BITTER ROOT VALLEY VEGETABLE EXHIBIT.

The resources of the valley will not long be confined exclusively to those connected with the cultivation of the soil. Valuable mineral deposits are being discovered, and the time is not far distant when this section of Mon-



tana will add her quota of precious metals to the wealth of the world. At the headquarters of the West Fork of the Bitter Root river is the Mineral Hill district, covering an area of fifty square miles, proved by competent authority to contain surface indications equal in mineral richness to anything known in the west. The whole district is covered with a series of true fissure veins thoroughly mineralized, and carrying gold, silver and copper. In this district but few locations have thus far been made, and but little development work has been done, owing principally to the fact that the district is more than a hundred miles from the railway, and heretofore it could be reached only by a difficult pack-trail. This difficulty has, however, been overcome by the construction recently of a wagon road, costing more than twenty thousand dollars, to the Monitor mine, which is being rapidly developed, and is showing an amount and richness of ore that is a surprise to its owners. Prospecting and development work will now progress rapidly in the district. A concentrator and other mining machinery will be put up, and hundreds of other wealth producing mines will be developed. Hughes creek, on the west fork of the Bitter Root river, also lies in a very rich placer region which is but partially developed. Several claims upon which considerable development work has been done in the past are now yielding as high as twenty dollars to the man per day, and the extent and richness of the district is increasing as the work of prospecting and developing is pushed forward. In the same district is a vast section of country underlaid with coal measures varying in thickness from five to twenty-five feet, and containing a good quality of lignite coal, which has been pronounced by experts to be very valuable, and which will be a source of great wealth to those so fortunate to possess claims there, as soon as railway transportation reaches it. On the west side of the river near Victor are the Pleasant View mining district and the Curlew mine, which, under fair prices for silver has paid rich dividends, and has a concentrator and much high priced machinery; the Whip-poor-will and Last Chance mines adjoin the Curlew and give promise of equal richness. On the east side of the river in the main range of the Rocky mountains on Claremont creek is an extensive system of copper bearing ledges, and placer locations have been made and profitably worked on Burnt Fork and Three Mile creeks, while the White Cloud mine on Eight Mile creek has an expensive concentrator, and has been worked for several years.

The immense tracts of timber covering the mountain sides and lining the numerous streams breaking through the mountain wall on either side of the valley at the present time support one of the chief industries of the valley, and a large amount of capital has been invested in it. The lumber business here furnishes employment for about five hundred men the year round, and creates the largest pay-roll of any business in the valley.





#### Assessed Valuations.

Real, \$4,507,964; personal, \$1,541,065; railroads, \$493,715; total, \$6,542,740.



## Gallatin County.

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**One of the Richest Agricultural Counties of the State, Reaping a Rich Reward  
Each Year as a Return for the Investment of Labor on the Farm and  
the Range.**

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Journeying westward from St. Paul on the Northern Pacific railway the first mountains that are encountered by the railway grade is the Gallatin range, which is the dividing line between Park and Gallatin counties.

Laboriously the west coast limited train, drawn by one Mogul engine and propelled by a second, makes its way up the eastern slope for a distance of 15 miles, through some of the most beautiful mountain scenery in a state noted for the majesty of its peaks and ranges.

Well nigh to the summit of the Muir (sometimes called Bozeman) tunnel is reached and passed. This tunnel, nearly a mile in length, lined throughout its entirety with brick laid in cement, is a grand tribute to engineering skill, cutting off, as it does, nearly three miles of the heaviest grades on the Northern Pacific railway. Once the tunnel is passed, the second engine is dropped, and the train speeds on its way, dropping nearly 1,000 feet in the first eight miles from the mouth of the tunnel.

The canyon traversed is known as Rocky canyon, and well known it is truly, so narrow and precipitous is the canyon, that when the railway was granted the right-of-way through this canyon it was necessary to use the public highway for its roadbed, and to blast out and excavate a new highway along rocky ledges and narrow shelves, far above the original site. On either side of the train views are to be had of scenery of the wildest and most picturesque character imaginable.

At the mouth of the canyon the railway passes through old Fort Ellis, where barely two decades ago were stationed in the interests of peace and harmony, four companies of United States troops, whose hands were full in repressing the raids and outbreaks of the hostile Sioux, who, by the right of possession, owned the valley of the Yellowstone. As one passes Fort Ellis, far to the northwestward, 50 miles as the crow flies, is to be seen the Tobacco Root range of mountains, while to the northward, and farther still, are to be outlined the Boulder mountains. Swinging to the right a little the Bridger mountains, the Eastern boundary of the county, are seen and skirted, while to the north the Horseshoe Hills fill the gap intervening between the Bridger and Big Belt mountains. Never did so beautiful a valley have such wondrous setting as is given to this exquisite dimple on nature's face by the encircling and protecting ranges.

Nerve-racked by the unceasing winds of Minnesota and Dakota, with the eye wearied by the glare of the sage brush plains of Eastern Montana, one drops down (or upward) into a green oasis, hedged about by lofty mountain ranges, whose sides are clad with the greenery of the abundant conifers; the vast plain (if in the summer) is like a mighty checker-board of color, the varying shades of green and golden, being the composite effects of the fields of wheat, barley, oats, the meadows of clover, alfalfa, timothy and red top encircling the valley, or the boundless and endless fields of winter wheat and



A RANCH COTTAGE.

rye, literally a golden setting for the emerald low lands beautiful in the dress of spring crops.

Threading this beautiful Titanic garden are streams, clear, cold and pure, leading out of every mountain canyon and valley at intervals of a mile or two apart, nearly a hundred in number, all heading for a common center, the three forks of the Missouri. Each and every one of these en route is made to pay tribute to the husbandman, and does its full share to increase the natural productivity of the soil.

Over and over again is this water used, first diverted to the soil at or near its exit from the mountains, it quickly finds its way (much of it, likely a third) by subterranean passages, back into the original stream bed, to be again carried out in ditches into other fields and meadows, and again comes a resurrection and added life to its vegetation.

A holy union is that of land and water, blessing and fructifying the world as it does, especially if the control is in the hands of a son of old Gallatin, all

of whom are accomplished irrigators, with a maximum temperature of 93 degrees in the height of summer, with an abundance of water, and soil as highly charged with nitrogen, phosphoric acid and potash as this is, we have every requisite for ample and abundant production.

Proximity to the mountains compels ample moisture precipitation for grain germination, clear skies through the growth period, and equable temperature guarantees freedom from blight. Damp soil from irrigation is death to the chinch bug, hessian fly and the grasshopper, and natural richness and fertility promote such a growth of fibre and fruit as renders Gallatin county yields the wonder of the civilized world. California boasts of its wheat lands (with an average production of 15 bushels), Iowa of its corn fields, Connecticut claims distinction as a producer of tobacco rare in quality, Arkansas is the home of the big red apple, and Missouri's best crop are the energetic boys and girls who, emigrating to Montana, have helped to make Gallatin famous by their intelligent, faithful labor. Gallatin has no specialty. Every good thing in agricultural production becomes the better for association with her sun-kissed, brook-bedewed fields.

Wheat, oats, barley, winter rye, field peas, vegetables, potatoes, sugar beets, carrots, sweet corn, flint corn, clover, alfalfa, timothy, blue joint, red top, blue grass, swine, sheep, cattle, poultry and boys and girls are here bred that are beyond compare.

Given twelve months notice, and with no help from any other county of Montana, Gallatin will gladly undertake to feed a population double in number that now to be found in Montana. Nor is the Gallatin farmer distressed at the prospects of depleted fertility of soil.

The experiment of the station under the efficient management of its first director, devoted seven years quite largely to promoting the culture of the legumes, clover, alfalfa and field peas. So thoroughly was this propaganda conducted that the acreage of legumes now growing far outstrips that of any other one crop.

There is scarcely an acre in Gallatin susceptible of being plowed that is not ideal clover land. There is no waiting for the slow process of nitrification of the soil (clover germ deposition). When these fat lands were made, they were clover lands, ab initio, from the beginning.

That clover in Gallatin county will beget grain is fully proven in the behavior of barley for three successive years following clover of a single current season's growth. (about 125 days). First year, 63 bushels; second year, 83 bushels; third year, 84 bushels of first-class number one barley. This being the sole means used to fertilize the soil. Fields of oats have yielded 129 bushels per acre, machine measure; by weight this would have been increased fully 15 per cent. Wheat occasionally turns out 60 bushels per acre.

The valley is studded with flourishing villages and towns. Chestnut, Bozeman, Belgrade, Central Park, Manhattan, Logan, Willow and Three Forks Creek are railway points, while in the interior are Salesville, Duncan and Baker.

The Northern Pacific railway runs every day in the year four daily trains over its main line, and a good service over its branches to Trail Creek. The





A GALLATIN COUNTY CABBAGE.

northern and northwestern boundaries of the valley proper are traversed by the main line, and the liberal policy of this railway affords ample facility for the transaction of business to the farmer and merchant.

The gross earnings of the Northern Pacific railway for the freight and passenger traffic of Gallatin county is very close to a million dollars annually. There is a steady and satisfactory increase in the volume of business year by year, and the railway manifests appreciation by constant improvement in service and substantial reduction in tariffs.

Bozeman, the county seat, is a thriving town of 5,000 population. Two banks carry almost a million (\$1,000,000) in deposits, two flour mills having a manufacturing capacity of 500 barrels daily are run to full capacity, a model brewery manufactures beer equaled only by Milwaukee's best from the choicest of barley. Churches, clubs, secret orders, schools, the state college and station, offer all the advantages of civilization.

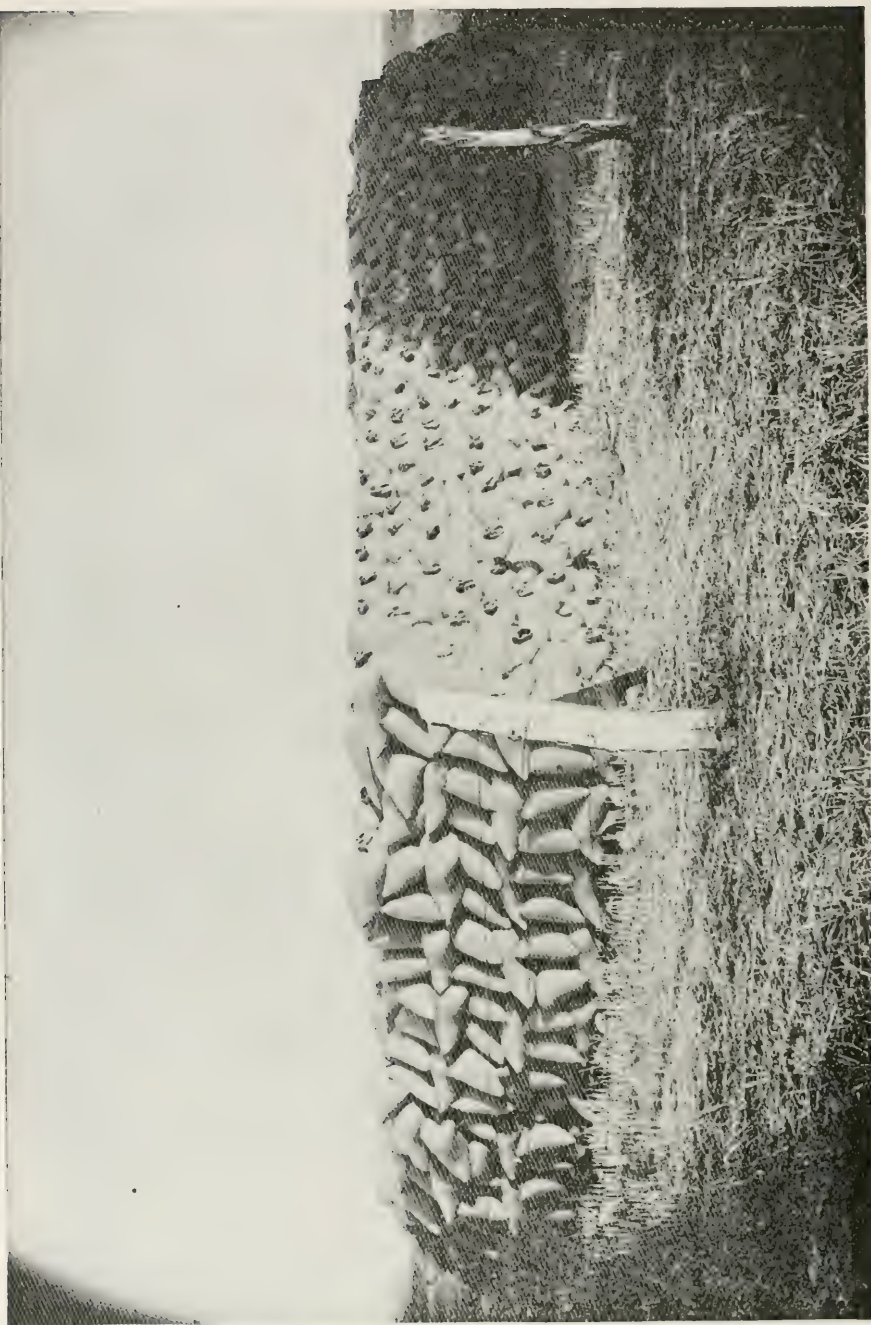
Belgrade does a thriving machinery, mercantile and grain storage business. Manhattan is a fine business point. Here are located the malting plant of the Montana Malting company, the paper mill of the Montana Paper and Pulp company, two hotels, a fine graded school, stores, etc. This thriving village is surrounded by the lands of the Manhattan Malting company, now offered for sale for the first time, on most desirable terms.

Heretofore the farms of Gallatin county have been too large (averaging 330 acres) to make ideal communities. The burden of taxation has fallen upon a comparative few in numbers, and a sparse rural population has not afforded the field for that full mercantile development that is always associated with large bodies of fertile lands.

Following the example of the Manhattan Malting company (the largest individual holders of land in the county), other large holdings will doubtless be put on the market, and the result be, to the decided advantage of the county and state. Unquestionably Gallatin county in the past 30 years' record of crops has established her well earned right to being the heaviest continuous producer of No. 1 grain on the western continent, and is now prepared to enter the list against the world in successful crop diversification. Much is needed in the line of capital and muscle.

Promising fields that are especially inviting are along dairy and creamery lines. Rich and nutritious grasses, cereals trebling and quadrupling that of the United States at large, pure, cold water in abundant supply, healthful climatic conditions and a market ready made for the product, are factors worthy of the consideration of those in other sections interested in such propositions.

Meat products, notably of swine, can be most successfully created in Gallatin county. Fairly satisfactory results have been achieved by farmers who have produced pork for the Butte market solely and wholly on alfalfa. Unquestioned records show a gross cost of pork production to have been 2 cents per pound in Gallatin county, leaving a respectable margin between this and the selling price at any time in the past ten years. To the eastern and southern farmer and stockman contemplating a change of base, it will be an attractive statement that hog cholera, the curse of the western swine grower, is unknown in Gallatin county. At long intervals swine have been known to die



GALLATIN COUNTY WHEAT.

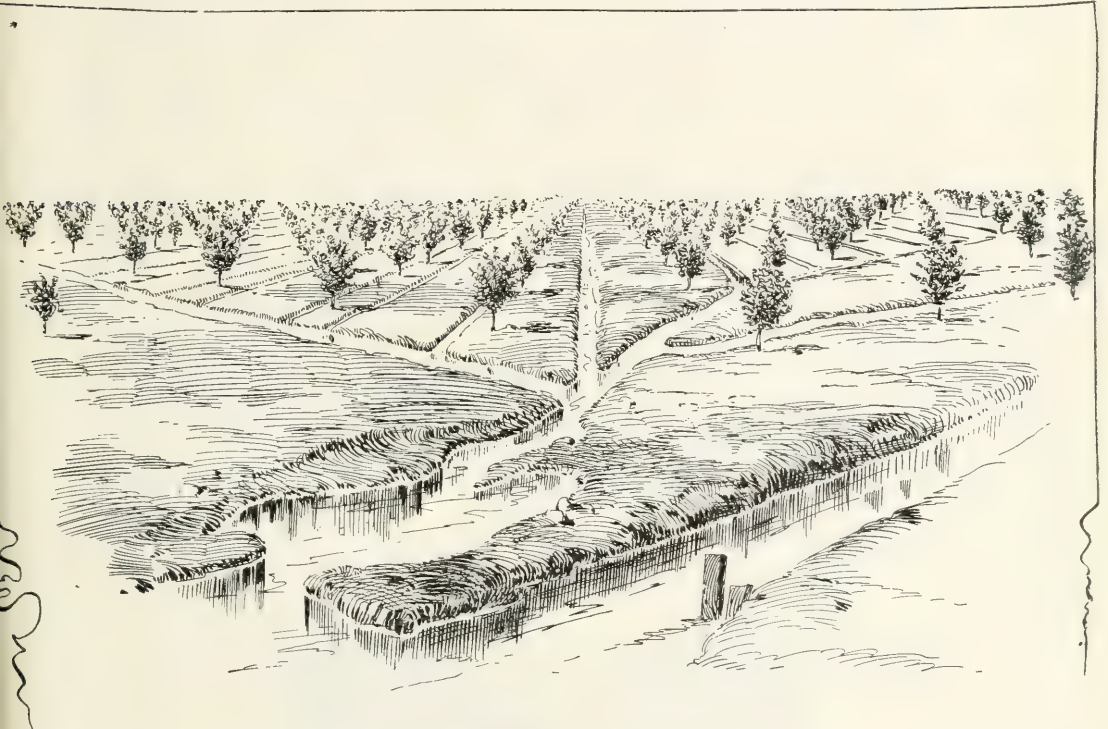


of cholera in this county, but such have always on investigation been found to have been exposed to the disease prior to shipment. We have never known the disease to have been transferred from imported to domestic swine.

Poultry is another sure means of profit, fowls of all kinds succeeding remarkably well.

Fruit culture is being successfully conducted along all the foothills bordering the county. The county is certain to become a large exporter of winter apples, once the available orchard lands are set to hardy and desirable varieties.

The Gallatin strawberry has made itself well known in the state markets,



A YOUNG ORCHARD IRRIGATED.

coming in, as it does, after the usual run of early berries, and by its lateness purchasing perfect immunity from the bete noir of berry growers the United States over, the late spring frosts, it is a most welcome visitor to the table of all who love this luscious fruit.

Considering all things conducive to longevity and prosperity, there can be no section of the United States that offers so much to one anxious for a home as is to be found in Gallatin county.

Educational advantages are of the best. So perfect is the public school system of the county that a graduate therefrom has a liberal education. Nearly every evangelical denomination of religion is to be found within her borders. A climate approaching perfection between the months of May and December. The winter months abound in clear, balmy, sunshiny days, with barely sufficient snow fall to afford summer moisture. Building material cheap and abundant, as is the fuel supply.

Consumption and its first cousin, catarrh, are practically unknown, low, wasting fevers are never here contracted, while malaria and asthma have no opportunity to exist in an altitude similar to that of the county.

The most ardent sportsman can gratify his highest longings for game within the boundaries of the county. Bear, mountain lions, wild cats, elk, mountain sheep, deer, fox, coyote, timber wolf, beaver, musk rat, blue grouse, ruffed grouse, sharp tail grouse, fool hens in season, ducks, geese, swan, cranes,, all are to be found in fair supply. The careful, able sportsman never makes a water haul.

The streams abound in the choicest of game fish, three species of trout, the grayling (a fish that made the waters of Michigan famous, but that are practically extinct there at the present time), the white fish, these are the leading numbers of the finny tribe in Gallatin county. The legitimate joy of sporting is here increased many fold in its pursuit. The sportsman is not called on to travel dreary wastes of desert, nor to thread inextricable, impassible thickets, nor to traverse dangerous swamps. He is free of the dangers, troubles and numerous reptiles and insects, and the stimulus afforded by the rarified air is like a draught of strong waters upon the system. Again, the keeping quality of fur, fin and feather is greatly prolonged and extended in this pure air, and there is small excuse to the hunter for being found with tainted game or fish.

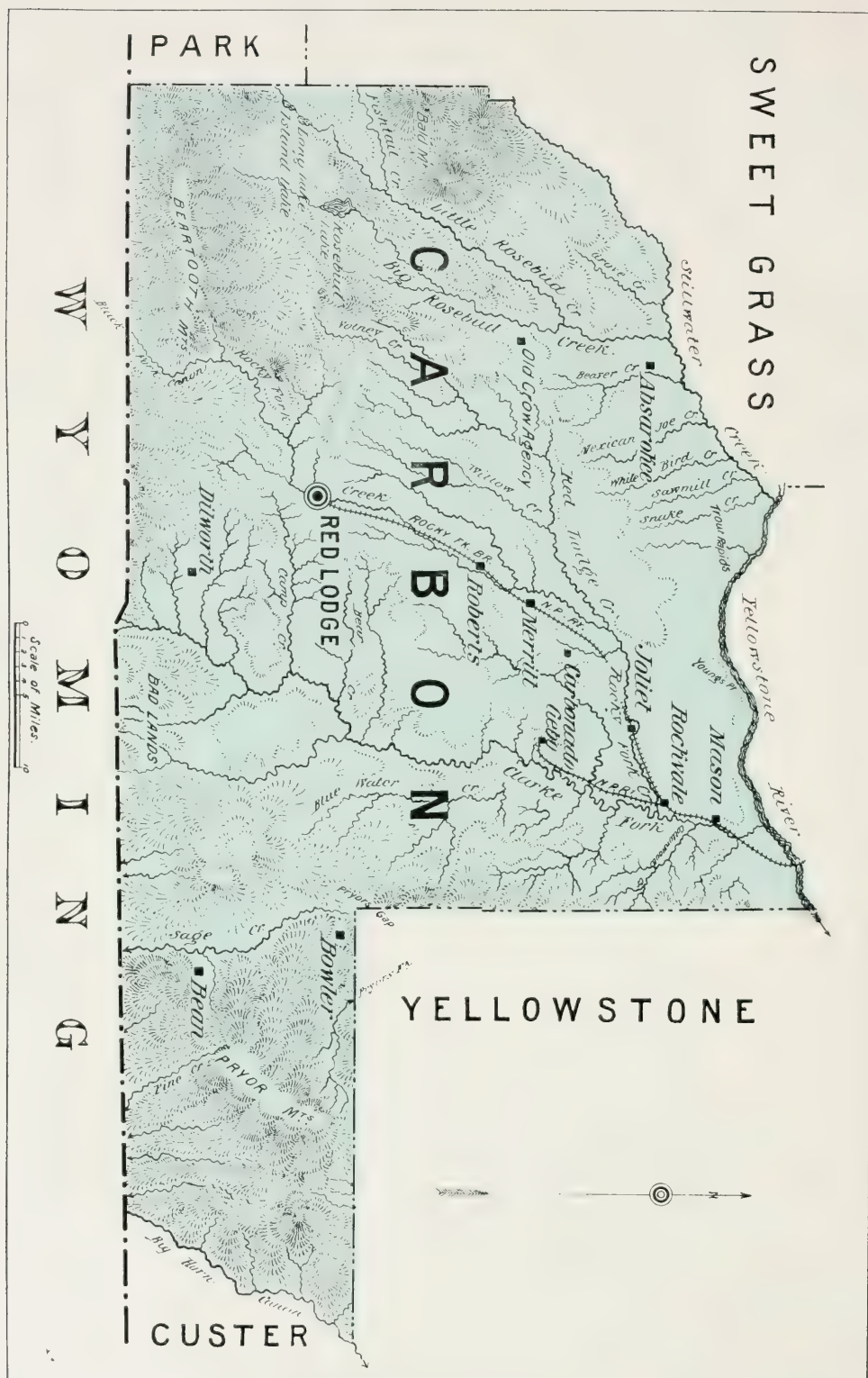
Gallatin county is an English speaking community. Its early settlers were usually American born, and there has been no attempt to transplant foreign colonies on to its territory. The few who have found their way hitherward have been speedily assimilated with English speaking folk. There need be no better county in the land than is old Gallatin.



SLEEPING CHILD SPRINGS.







# Assessed Valuations.

Real, \$970,529; personal, \$1,411,371; railroads, \$292,741; total, \$2,674,641.

## Carbon County and its Great Resources. 3 3 3

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Coal and Mineral are Added to the Agricultural Resources, and Combine to  
Make This One of the Richest and Most Prosperous Counties in the State.

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Carbon county was created in 1895, and has an area of 3,000 square miles, and is assessed for \$2,674,641, divided into, realty, \$970,529; personal property, \$1,411,371; railways, \$292,741. The population is 7,533, of which more than 1,500 are miners engaged in the development and working of the coal and quartz mines of the county. The industrial resources of the county are mining, farming and stock raising. The principal valleys are the Yellowstone, Clark's Fork, Stillwater, Rocky Fork, Rosebud and tributaries. All lands require irrigation for cultivation. There are 44 miles of the Rocky Fork and Cooke City branch of the Northern Pacific railway in the county. The facilities for combined farming and stock raising are unusually good.

Red Lodge, the county seat, is located on the Rocky Fork river at the base of the mountains, and is the terminal of the railroad and a shipping point of some considerable importance, being the outlet for the sheep and cattle ranges of a part of Northern Wyoming. It has a population of 1,500, with good school.

Not in all the broad domain of the "Treasure State of Montana" are the natural resources more fittingly adapted for the agriculturist or stock grower than are those within the boundaries of Carbon county. The numerous small streams flowing down its fertile valleys furnish an abundant supply of water for irrigation not surpassed by any other agricultural section of the state. Along Rock creek the stream makes a descent of about 100 feet to the mile, and the numerous irrigation ditches along its course attest the fact that nearly all the bench lands stretching for several miles back from each side of the Rock Creek valley proper can be brought under cultivation and made to produce wonderful crops with but little labor. The Clark's Fork and Stillwater rivers, with their tributaries, do not fall quite as rapidly as Rock creek, yet inexpensive irrigating ditches and canals are met with on every hand, and much of the rich soil of these valleys is being brought to a high state of cultivation. Statistics have shown that the most populous and prosperous regions of the earth are those in which irrigation is practiced. The natural advantages of Carbon county in this respect will show that she is destined at no distant day to have no superior in the state. In Carbon county the yield

within the state much more than equals the supply, the producer of these staples does not have to pay large transportation charges to get his product to a market. In years past the hills and valleys of what now comprises the county of Carbon were monopolized by large herds of cattle and sheep, but since the valleys have been settled upon, and the streams fenced in to a large extent, the great herds have been reduced, until now the stock is almost entirely owned by the smaller holders and ranchmen. The hills and grazing lands back from the streams will always afford plenty of pasture lands for small herds of stock, and the rapid development of the coal mining industry provides a ready home market for products of both farm and range. Alfalfa, staple fodder for cattle, sheep or hogs is being raised by nearly every ranchman in the county. The yield for a season is from three to five tons to the acre. Barley, equal in every respect to the noted product of the Gallatin valley, is grown here, and finds a ready sale in the eastern states, to be used for malting purposes. Oats yield from 60 to 80 bushels per acre, and bring from 75 cents to \$1.25 per hundred pounds. Corn, vegetables and small fruits all grow splendidly in any of the valleys, and command good prices.

However much Carbon county may be blessed with agricultural and stock growing resources, the fact must not be lost sight of that her coal mining industry is one of the chief institutions of the state. Outside of the high mountains in the southwest corner, the entire county is underlaid with measures of semi-bituminous coal. At Red Lodge, on the Rocky Fork, mines have been operated extensively since 1889, and the coal is being used on railroads, in smelters, mills and for domestic purposes from the Missouri river at Mandan, North Dakota, to the Washington state line. These mines employ from 300 to 500 men, and indirectly support as many more. At Carbonado, about 20 miles northeast of Red Lodge, the Anaconda Copper Mining company is erecting a coal mining plant that will be the equal of any in the west. This company will use the coal at their smelters at Anaconda, and will employ in the coal mines from 1,000 to 2,000 men. At Bridger, the coal measures have been developed and a mining plant erected by Butte mine owners and others which will soon be shipping from 150,000 to 250,000 tons of coal a year. At Gebo a company has been at work putting in a coal mining plant that will have an equal capacity. A railroad to these two points has just been completed, and the mines will soon be in active operation. Other smaller companies are operating coal mines within the county, and it is safe to estimate that from 5,000 to 10,000 men will eventually be employed in Carbon county in this single industry. South and west of the railroad shipping points of Carbon county are the quartz mining districts of Sunlight, Wood River, Stinking Water, Grey Bull and New World. From the former district rich silver and copper ores are being mined and freighted to Red Lodge for shipment to smelters. In the Wood River district arrangements are being made by one of the mine owners for keeping 30 freighting teams at work hauling ore from one of the mines during the coming year. In the New World district a ten-stamp mill and concentrator is in successful operation. At no distant day smelters will be constructed in the vicinity of the coal measures, and these ores will then be treated without incurring the expense of trans-



portation charges. Near the headwaters of Butcher's creek, about 15 miles west of Red Lodge, are petroleum fields, where crude petroleum oozes out of the sandstone. During the past fall a diamond drill was operated here, and at a depth of 250 feet a fine quality of oil was reached, which rose up over 40 feet in the well. A larger drill has been ordered for permanent use here, and soon another great industry will be added to Carbon county's wealth. Along the base of the Bear Tooth range of mountains, in the southwestern corner of the county, are immense reefs of the finest quality of limestone, from which a great deal of lime has been manufactured, and is being used almost exclusively in the towns of Southeastern Montana. Along the Clark's Fork river placer gold has been mined for a number of years past. The gravel bars along the river yield on an average 30 cents to the cubic yard. Miners and teams and scrapers have been making fair wages mining this gold for several seasons. Near the town of Bridger a plaster of paris mill has been operated for several years past, and the product shipped to all parts of the state. The quality of the cement is of the best, and the gypsum deposit, from which it is manufactured, is practically inexhaustible. Iron ore also abounds in the mountains, and will become valuable for smelting and manufacturing purposes. Immense sulphur deposits and mountains of the purest marble are situated on some of the tributary streams of Clark's Fork river.

Carbon county is now one of the largest coal producers in the state, and as much of the coal is suitable for the purpose, the production of a fine quality of coke has become an important industry. Beside the smaller concerns, there are three large operators that produce thousands of tons of coal per day—the Bridger Coal company, Rocky Fork Coal company and the Gebo Coal company, all of which are operating to about the same extent.

The coal mines and town of Gebo are located in a gulch to the west of Clark's Fork river. The town was named after its founder, who also developed the mines, and whose persistent energy has brought the industry up to its present magnitude. While Gebo is now called a coal camp, it is destined to be a substantial and prosperous city. Besides the support of the great mines, it has the support of an agricultural valley that cannot be surpassed anywhere for richness, and is occupied by thrifty and prosperous farmers, while the surrounding hills furnish an excellent range for cattle and sheep. The town is the natural trading place for all these ranchers and stockmen, and its commercial importance is astonishing for the size of the place. The ranchers and stockmen of Northern Wyoming are also beginning to trade there. With the thickly settled valley of prosperous farmers, working irrigated lands, where the crops never fail; with a range country in the immediate vicinity covered with thousands of head of cattle and sheep; with a coal mine which, when it reaches its maximum capacity will employ 1,000 men, the prospects for the future of Gebo are indeed bright. And there is the possibility, also, that it will be a smelting point for the rich ores of the mineral district lying to the south of the town. When a railroad reaches them, which is only a matter of a short time, it will be natural to haul the ore down hill to a smelting coal which cannot be surpassed in the state. It takes several tons of coal to treat a ton of ore, and when the mines of the Sunlight basin,

the Stinking Water and Cooke City are developed, their immense output of ore will be directly tributary to a town on the Clark's Fork for treatment.

Most of the business houses of Gebo are constructed of brick or stone, a splendid quality of the latter being available right on the townsite, while Gebo can boast of several residences which cost from \$1,000 to \$3,000. No town of its size in the state, in fact, has a better class of buildings, and for a coal camp, their character is unprecedented.

Farm lands can be obtained in the vicinity of Gebo for a merely nominal figure. Six years ago this country was all a part of the Crow Indian reservation, which was thrown open to settlement in the spring of 1893, and became public domain. The government land is not yet all taken, which is subject to entry as homesteads, the settler being required to pay \$1.25 per acre therefor. A number of the best homesteads near the town are held by Indians as Allotments, and 160 acres can be purchased from them for a few hundred dollars. Fully one hundred of these have been secured within a few miles of Gebo during the past year or so. And there is water enough in the Clark's Fork to irrigate every acre of tillable land in the valley. Ditches can be taken out at a minimum cost, the ranchers now having thousands of acres under ditches that they have built themselves, their only expense being the use of their teams.

Red Lodge, the county seat of Carbon county, is a thriving, bustling little city of something less than 2,500 people, and has an assured and brilliant future before it. The town is situated at the terminus of the Rocky Fork and Cooke City branch of the Northern Pacific railway, and is a substantially and modernly built little city. It has stone and brick business buildings, schools and churches and handsome residences. It has a weekly newspaper—The Picket—one of the brightest and typographically neatest local exponents of the state. Of the causes for the prosperity of the city, this authority says: Nestled at the head of the most fertile valley within the state, surrounded upon every hand by rich treasures of agricultural and mineral wealth, and unbounded opportunities for stock raising, Red Lodge sits as the mistress of a vast territory of wonderful resources. In her lap is poured with a prodigality that knows no ending the enormous output of this section. The farmer naturally seeks Red Lodge to find a market for his produce; the stockman gravitates this way as naturally as the water courses flow to the sea; while the coal miner finds this city to be his abiding habitat. But the coal miner prosecutes his search for mineral treasures not alone. His brother in the Big Horn Basin country and in the Cooke City district vie with each other in developing and opening up gold and silver lead mines, and their development means yearly a large expenditure for machinery and material, and the major portion of this trade comes to Red Lodge. All of these circumstances contribute their full quota to the advancement and upbuilding of this fair city, but probably no one industry is of so much importance as that controlled by the Rocky Fork Coal company. That company has a monthly pay-roll amounting to \$30,000. Every thirty days it distributes this sum among its 450 employes, who reside in Red Lodge, many of whom are married and support families. This industry may be called the mainstay of Red Lodge. As

a village, its birth was due to the establishment of this industry, and its growing greatness as a city has been fostered and encouraged by the constant working of the Rocky Fork coal mines. Daily shipping some sixty carloads of coal, the major portion of which is used by the Northern Pacific railroad, it can readily be seen that the coal mining industry of Red Lodge plays a very important and transcendent part in the continued growth and development of this city.

"The list of building improvements which have either been made in Red Lodge or are now under construction, tells eloquently of the progress that is being made by this city, and is a reliable and trustworthy index of the city's constant growth and continued development."

There is no county in the state that offers safer or more diversified opportunities for the investment of capital or the employment of energy than Carbon county.



SHEEP NOONING.



## **Yellowstone County and *The* City of Billings.**

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**One of the Best Agricultural and Stock Raising Counties in the State—Its  
Development Rapid and Extended, and Its Future Growth Assured—  
Billings, the County Seat, One of the Liveliest and Best of Our Growing  
Cities.**

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Billings, the county seat of Yellowstone, one of the richest agricultural counties of the state, has had a steady growth ever since the town was laid out. This is due to the fact that it does not depend upon a single industry for support. It is a commercial town, drawing trade from a scope of country that extends 150 miles on the north, the same distance on the south, and fully seventy-five miles on the east and west. This vast territory is as fine a stock and agricultural country as can be found anywhere in the United States. It is covered with herds of cattle and flocks of sheep, while the numerous valleys between the valleys are dotted with irrigated farms, the soil being as rich as that of the historic valley of the Nile. Thus Billings draws her sustenance from the great stock industry and her splendid agricultural resources, neither of which ever fail. Crop failures are unknown in an irrigated country, while the snows and rains are sufficient to insure abundant feed on the ranges for live stock.

Under such favorable conditions it is no wonder that a modern city has been built on the north bank of the Yellowstone, and, taking the past five years as a criterion, it is a conservative estimate that the city will again double its population in the same period of time, when it will boast of 8,000 inhabitants. Already Billings contains the improvements and advantages usually to be found in cities of 25,000. She has a fine modern sewerage system, to begin with; a good waterworks and electric light plant; telephone exchange, reaching out into the surrounding country; a fire department that would be the pride of any city; an elegant modern opera house, two fine clubs, scores of handsome homes, big business blocks, well-graded streets and two national banks that withstood the panic of '93, and met every demand made upon them. These are a few of the material advantages possessed by Billings. In addition to them, her intellectual and spiritual welfare have not been forgotten. A fine free public library, sustained at public expense, three public school buildings, and a fine high school edifice, two excellent newspapers and four churches, while the Sisters of Charity maintain an up-to-date hospital in its own home, costing \$30,000.







This is a brief review of the public improvements in Billings. The city is built in the fertile valley of the Yellowstone, and was named for the late Hon. Frederick Billings, of New York, at one time president of the Northern Pacific railroad. That great transcontinental line passes through the town, which is 892 miles from St. Paul, 238 from Helena and 1,164 from Portland. The Burlington & Missouri River railroad also reaches this point with its Wyoming branch. Billings was laid out in March, 1882. It has an elevation of 3,112 feet, a climate unsurpassed in healthfulness, and as enterprising a people as can be found anywhere in the universe. In the manufacturing line it has a 150-barrel flour mill and a modern brewery with an annual capacity of ten thousand barrels, and a number of lesser, but entirely successful industrial institutions.

There are splendid openings here for a large woolen mill, a canning factory, pork-packing plant, and other manufacturing plants of a similar character, while the establishment of smelters to handle the ore of the mines now being developed to the south of the city, is by no means a remote probability. The cheap coal that can be secured by rail from the neighboring county of Carbon encourages this belief.

The commercial interests of the city, as already indicated in this article, are larger than those of most cities of several times the size of Billings. An idea of them may be had from the fact that a single firm pays railroad freights aggregating \$40,000 annually, while several others pay two-thirds and half that amount. It is the large stock and agricultural interests, of course, which give Billings such prominence in a commercial sense. The large cattle and sheep outfits, when they purchase supplies, come in with freight teams that haul almost as much as a railroad train. Their trade is worth a vast sum to the city, it not being an uncommon thing for single purchases by the stockmen to run into two or three thousand dollars. Such a large volume of business is going to make a wholesale town of Billings. One exclusive wholesale grocery is already established here, while several of the big retail establishments constantly keep men on the road to look after their out-of-town orders. The city, in fact, is already largely engaged in the wholesale trade, which is increasing with a rapidity which can be attested by the commercial travelers; they sell more goods here, they say, than in any other city in the state, with the exception of Butte. But Billings must be seen to be appreciated. With its wide, well-graded streets, its shade trees and comfortable homes, its neat railroad parks facing the principal business street, its largest suburban park, fair grounds and other public improvements, Billings is a desirable place to live. And its commercial and industrial activity also make it a profitable residence point. Taken with a healthful climate, with more sunshine than any other section of the United States can boast, what more can be desired? Billings is a beautiful little city, and it is the home not only of thrift and enterprise, but of culture and intellectuality as well; Billings contains only the minimum number of the rough, rowdy element so common to most western cities. There is no place here for men of that character. There are places here, however, for mechanics and honest workingmen; for business men of small or large means; for professional men, and for people retired from busi-

ness, who desire to spend the remainder of their days in rest and comfort. But the superior advantages offered to new comers lie in the agricultural resources of the fertile valley in which the city is built. They cannot be surpassed anywhere in the world.

In connection with the stock industry, they have made Billings what she is today; with the changed conditions, consequent with the curtailment of the ranges, they will be responsible for her future, which they have assured beyond a doubt. They have and will continue to attract other pursuits and industries, until, when every farmer is a stockman, and every stockman an independent capitalist, the population will be so increased that manufacturing will be a necessity. That is all that is needed now to make Billings a city of 10,000 or 15,000, and natural conditions will provide what is lacking in this direction. The city is growing so rapidly that capital is sure to seek investment here in manufacturing and its rich tributary country.

The assessed acreage of the county is 825,101 acres, and the realty assessment, \$2,342,544, the personal \$2,053,625, the railways \$782,519, making a total valuation for taxation of \$5,178,688.

The county derives its name from the Yellowstone river, which flows through it. It is essentially an agricultural and stock growing county, having no mineral resources. The agricultural areas are fertile, and a large proportion has been irrigated and is very productive. It is estimated that 100 square miles have been irrigated, and that there are several times that area that may be. The elevations of the valleys range from 2,500 to 3,500 feet, and the soil varies from a sandy loam to "gumbo," and from a few inches to forty feet in depth. The soil requires irrigation to insure profitable cultivation. Corn and all grains, grasses, vegetables and root crops yield abundantly. Alfalfa is one of the most profitable crops grown in this valley. Three crops are cut in one season, and yield from four to six tons per acre. Oats run from 59 to 125 bushels per acre, wheat 35 to 40 bushels, and other grains in proportion. Barley culture will soon be extensively pursued, the larger part sold for malting. Flax is also grown successfully, and farmers are encouraged to make it a staple crop. Potatoes attain an unsurpassed perfection. Small fruits are grown in all the valleys, and yield largely. Their culture has paid well, and the farmers are every year devoting more attention to their production. The experiments in the growing of apples, grapes, plums and cherries proving successful, many orchards are being planted, promising to make Yellowstone one of the fruit counties of the state. Strawberries attain a size and flavor unsurpassed. The rapidity with which vegetation responds to the genial influences of warmth and moisture is marvelous, and the productiveness of the soil excites the wonder of those unaccustomed to farming operations under the influences of irrigation.

The irrigation project that is being forwarded under the auspices of the State Arid Land Commission embraces 30,000 acres of as strong and productive land as can be found in the western country, or anywhere, for that matter, and this tract, when settled, will accommodate 180 families, which at five to the family, means the addition of one thousand people to the immediate patrons of our beautiful city, with both their purchases and sales, and the

addition of income they will bring to the county, without any appreciable increase of expense, will not be inconsiderable. To this addition to the patronage of Billings will come that of the Bridger district, the irrigation of which is now under way. This district embraces 15,000 acres, and will afford farm locations for ninety families and 500 people, and the locations are being made so rapidly, and with so much eagerness, that it has dispelled any idea that the lands would be slow in settling.

The greatest industry of the county has been stock raising. More than three-fourths of the county is grazing lands, and great bands of sheep and herds of cattle have grown and fattened on the ranges, and the resident owners have prospered. With the bringing of the lands under cultivation and irrigation, more attention will be given to combined farming and stock raising, the county now having 98 miles of irrigation ditches on the assessment roll, the total of which is \$4,480,052. Much attention has been paid in this county to the improvement of their stock by the cattle and sheepmen, and the more improved strains have been imported. The Burlington & Missouri River railroad enters the county from the south, having 47 miles of road in the county, with the terminus at Billings. The Northern Pacific crosses the county east and west, and has 101 miles of track in the county. The State Arid Land Commission has completed a survey for a large canal, intended to divert the waters of the Yellowstone to the bench lands east of Billings, which if accomplished will open rich and fertile lands that will furnish homes for thousands of people.

The climate of the Yellowstone valley, taken the year round, is as healthy as in any portion of the United States. The reports of the signal service observers show that this section of Montana enjoys more sunshine than any section of country in the world. Contagious diseases are unknown here, and in this valley the altitude is low enough, about 3,000 feet, not to have an unpleasant effect upon persons who have been accustomed to living at sea level. The winters are usually cold, but they rarely set in till Christmas, and it is more comfortable in this valley at 30 degrees below zero than in the eastern and middle states at a few degrees below freezing. It gets extremely warm during the summer, but the heat is not of that debilitating character, and, by reason of the altitude and close proximity to the mountains, the nights are always cool. The climate in the fall is delightful. The springs are short but not disagreeable, and, all things considered, a more pleasant place of residence cannot be found for a person enjoying fairly good health.

The principal town in the county besides Billings is Columbus, located forty miles west. The other towns, which are mere villages, are Park City and Laurel on the west, and Roundup and Musselshell Crossing on the north. To the south, separated by the Musselshell river, lies the Crow Indian reservation, a portion of which will soon be a part of this county. The principal streams in the county are the Yellowstone and Musselshell rivers. They are fed by numerous small tributaries, furnishing ample water to irrigate all the arid land in the county.



## Missoula County.

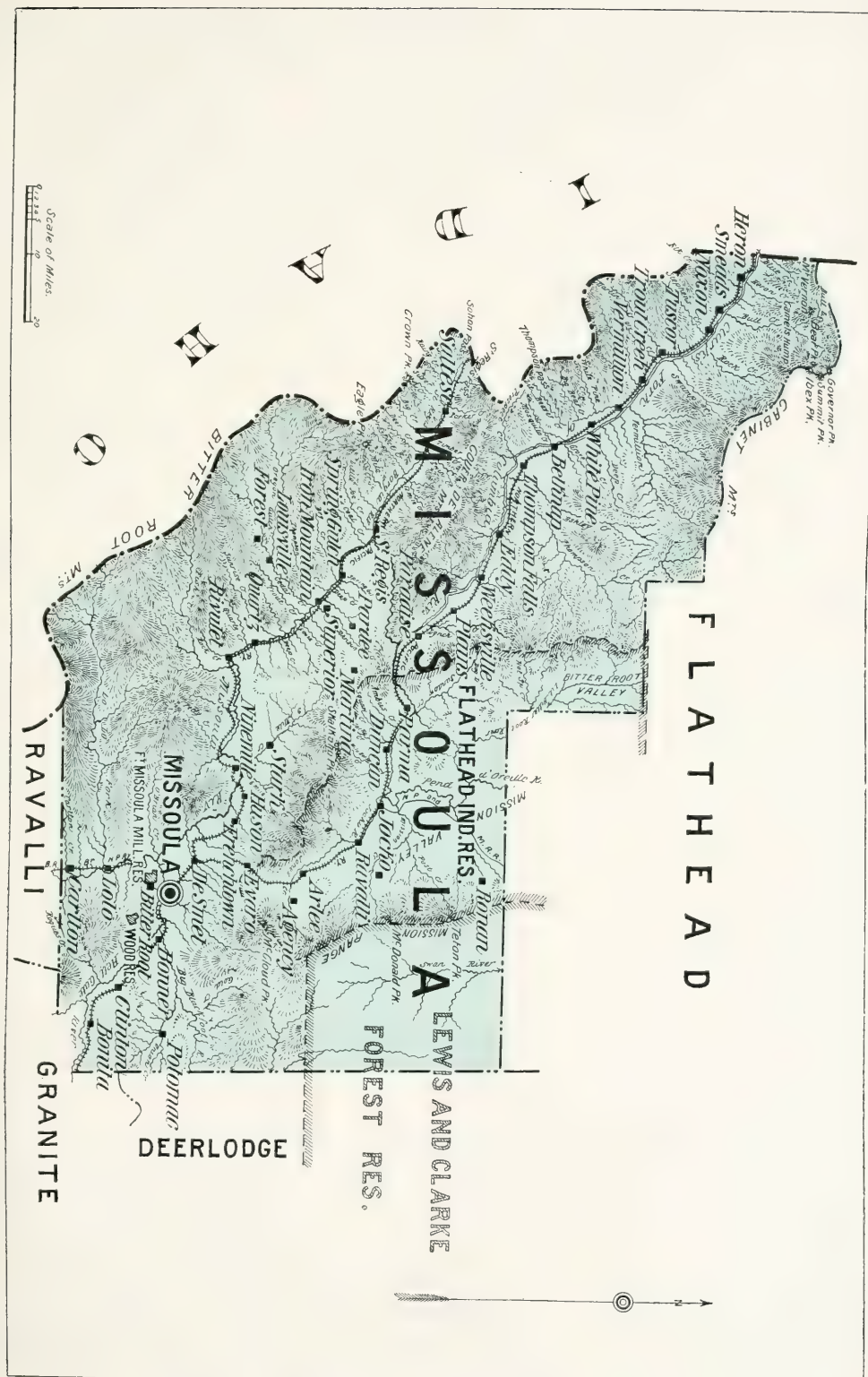
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**Wealthy in Minerals, Timber and the Finest of Agricultural and Horticultural Lands—A Delightful Climate.**

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Missoula county, lying on the west side of the Rockies, has a population of 13,964, an area of 7,150 square miles, and is assessed for \$7,547,277, the realty assessment being \$3,828,223, personal property \$1,998,656, and railways \$1,720,398. The county is watered by the Missoula river, the Rattlesnake, the Blackfeet, the Bitter Root, and several minor streams. These unite to form Clark's Fork, which, with its tributaries, drains the entire western portion of the county. The ranges of mountains that determine the direction of the rivers are the Rockies, in the eastern part of the county, and the Bitter Root and the Coeur d'Alenes in the western part. Numerous peaks and elevations give tone and vigor to the landscape. Prominent among these are Lo Lo, Mount Jumbo, Point Lookout, Old Sentinel and University peak. Some very prominent elevations bear as yet no definite names. For the most part the mountain slopes are gentle and undulating; occasionally, however, they take a more rugged form. Sometimes these mountain sides are wooded to the very top, and again they are open, furnishing excellent pasturage the greater portion of the year. Along the various streams, and in many cases on the hill sides, will be found large areas of arable land. The abundance of streams, and the large flow of water in them, makes it possible to irrigate the land wherever it is necessary to do so for the production of crops of any kind.

The mineral wealth of Missoula county is very great. Lead, iron, silver and copper are especially abundant in the western part, while gold, silver and copper predominate in the eastern. Coal has been located at different points, but has not yet been mined very extensively. Granite, syenite, limestone are abundant, while building stone is very plentiful and of the very best and most durable varieties. Fire clay is found in considerable quantities, and in many cases the ordinary clay is well adapted for brick making. The timber is mostly pine, tamarack and fir, although cedar, spruce, cottonwood and other varieties are well distributed throughout the valleys and on the mountain ranges. The valleys of the Missoula, of the Bitter Root and of Clark's Fork afford a wide expanse of land for agricultural purposes. The Flathead Indian reservation, lying as it does principally on the slopes that border on Flathead lake and river, also affords a large and well watered tract of arable land. Missoula county is rich in minerals, ores and mines, but still richer in her agricultural and horticultural resources. While stock raising is carried



# Assessed Valuations.

Real, \$3,828,223; personal, \$1,998,656; railroads, \$1,720,398; total, \$7,547,277.





on to a considerable extent in some parts of the county, the greater amount of attention is paid to the production of oats, rye, barley, wheat, hay, vegetables and fruits. The Bitter Root, Lower Missoula and Clark's Fork valleys are especially adapted to wheat raising, and large quantities are annually produced. The mild and even climate of the valleys make them wonderfully productive in fruits, as well as cereals and vegetables. The apples, pears, grapes, plums, peaches, etc., of the Missoula and Bitter Root valleys are not excelled for beauty or for flavor. Small fruits, such as strawberries, blackberries, cherries, raspberries, currants and gooseberries, are abundant and of the best quality. Peaches are grown successfully in many localities. The strawberry is particularly excellent for its canning qualities, as it keeps its form and flavor when canned or preserved much better than when grown in many other places. The distribution of the railroads is such that excellent facilities are afforded for shipping, and as a result the fruit is shipped in great quantities to Helena, Butte, Anaconda and other markets.

The lumber business is one of the important interests of Missoula county. The principal lumber center is at Bonner, near the mouth of the Blackfoot river. Here are located the extensive mills of the Big Blackfoot Milling company. Other sawmills at different points furnish an abundance of lumber for building purposes. The tamarack is very much prized on account of the beautiful finish it takes, and on this account it is very much used for doors, cabinet work, wainscoting, etc.

Missoula county has an excellent system of public schools. They are well graded, and are managed by an intelligent and wide-awake class of teachers. The catholics have excellent parochial schools and also the Academy of the Sacred Heart, located in Missoula. The State University is at Missoula, and is growing rapidly in favor and influence. A good equipment has been provided, and excellent faculty selected, and full courses are in operation in the usual college and university lines of work.

Missoula, the county seat, is a city of some 4,329 people. It is located at the mouth of the Hell Gate canyon, where the Rattlesnake river enters the Missoula. The city has elegant brick blocks and all modern improvements. It is one of the best built cities in the west, and is noted for the absence of shacks and the inferior class of dwelling houses. Various enterprises give employment to a considerable number of people, and the city is growing rapidly. Missoula has the most beautiful location of any city in the state, and commands, commercially, the entire trade of Southwestern Montana. It has a United States land office, is the eastern terminus of the Coeur d'Alene branch of the Northern Pacific, and the northern terminus of the Bitter Root branch, which traverses the fertile valley of that name. The presence of the State University serves as an attraction to draw the better classes to Missoula for the purpose of enjoying the educational and social advantages offered. The comparatively low altitude, mild climate, pure water and abundant shade and fruits and flowers offer all the surroundings that so much contribute to pleasant homes. There is also in Missoula a strong religious sentiment that manifests itself in the many churches that adorn the city. Many of the prominent denominations are represented. The abundance

of field products of all kinds make living comparatively cheap, for the markets are supplied with fruits and vegetables of all kinds, all grown within easy radius of the city.

The seat of the Big Blackfoot Milling company's operations is located on the Missoula, at the mouth of the Big Blackfoot river. The milling company affords employment for a large number of people. There are good schools and an excellent hotel.

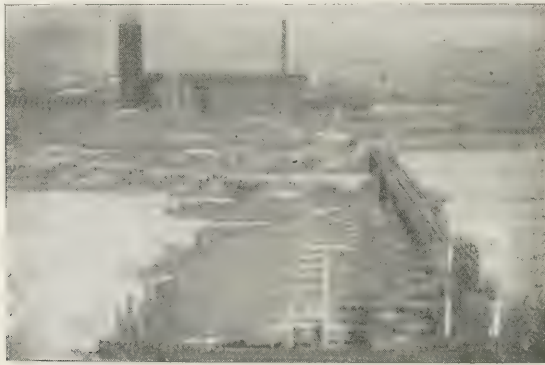
Plains is a flourishing town located west of Missoula, on the main line of the Northern Pacific railroad. It is a depot for an extensive agricultural region, where cereals of all kinds are grown in abundance. The wheat and rye produced in this locality are both excellent in quality, and abundant in quantity.

Thompson is noted for its lumber interests, and for its nearness to rich mines. It is a flourishing village and an extensive shipping point. A very remarkable phenomenon is found here. In sinking wells, just before the water is reached, or coming up through the water is a cold, colorless gas which keeps an even temperature the year round. Some of the merchants have piped this gas into their cellars, and thus have a perfect cold storage without expense.

Clinton, Bonita, Ravalli, Potomac, Frenchtown and other villages offer opportunities for trade and help to advance the commercial interests of the county.

Fort Missoula for several years has been garrisoned by companies from the Twenty-fifth United States infantry. The fort is beautifully located on the Bitter Root river, four miles from the city of Missoula.

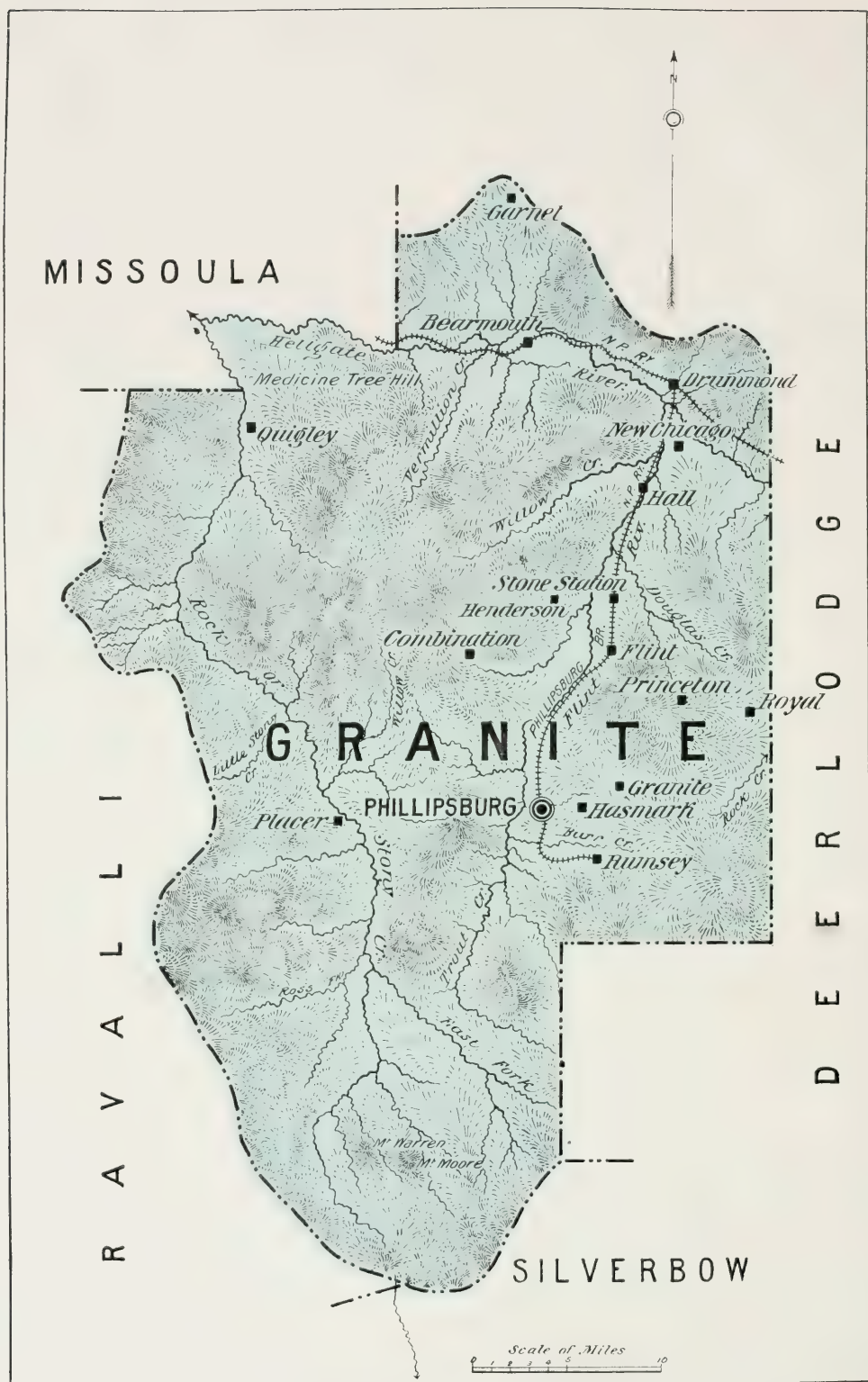
For beautiful rivers and streams of pure, limpid waters, and for graceful mountain scenery, Missoula is unsurpassed. There may be found that which is more rugged, there may be deeper canyons and larger rivers, but for picturesque mountains and rivers, with bright sunlight over all, this county must always stand pre-eminent.



HAMILTON MILL AND DAM.







**Assessed Valuations.**

Real, \$2,108,905; personal, \$3,352,567; total, \$5,358,874.

## Granite County its Towns and Minerals.

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Philipsburg, the County Seat, the Center of a Distinctive Mining County—Its  
Schools, Churches, Smelters and Mills—A Busy County With a Wealth  
of Resources.

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Philipsburg, the county seat of Granite county, is essentially a mining center, as within its boundaries are some of the greatest silver mines of the world—the Granite, Hope and Bi-Metallic mines—and others which, while they are not operated on so large a scale, they produce very high grade ores. These mines, together with the mills with which they are equipped, furnish employment to 400 men, thereby creating a pay-roll sufficient to support a city of considerable size. This, however, is not the entire pay-roll, as there are other industries, such as the electric light works, Philipsburg Iron Works, lumber yards, brewery and other institutions that materially help to swell the total.

Philipsburg is the county seat of Granite county, and has a population placed at 2,000.

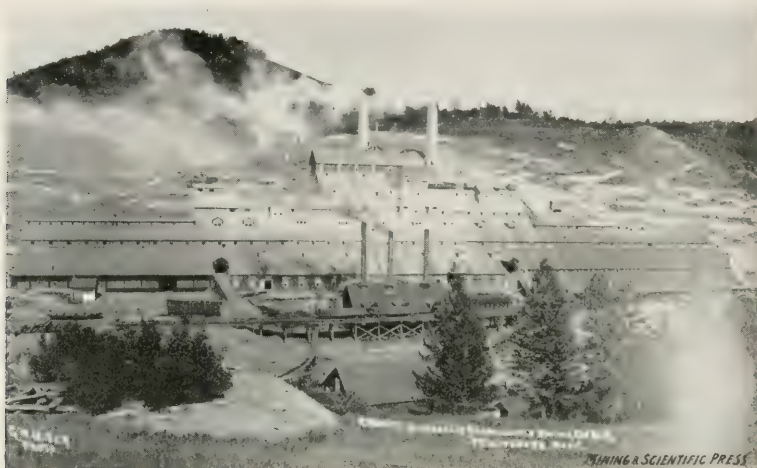
It has churches, schools, opera house, it is connected with the main line of the Northern Pacific by a branch line running from Drummond; it has a waterworks system, electric lights, good sidewalks, substantial business blocks, and in fact all of the modern improvements possessed by cities of greater population; it has all of the secret societies, literary and musical organizations—in short, the city is up-to-date in every particular.

One of the chief factors that have contributed to the past growth of Philipsburg and to the development of its mineral resources—and it is a feature that is most necessary to the material prosperity of any town or locality—has been the united support offered every endeavor by the business and professional men of the city. They have stood by the city with unwavering loyalty, and the present growth and universal prosperity are their reward.

One of the largest mining properties in the vicinity is that of the Granite Bi-Metallic company, and it is claimed for it that its mines are the greatest silver producers in the world, the values carried being almost entirely in this one metal. Before the slump came in silver, this company had in eight years paid over twelve million dollars in dividends.

The Granite Mountain Extension was located back in the 70s, but until it was acquired in 1880 by Mr. McClure, of St. Louis, was not credited with being more than a good prospect, and sufficient work had not been done to

more than demonstrate this. At this time Mr. McClure and associates took hold of the property, and during the next year expended some \$50,000 in development, and before the final development and demonstration of the property had been made an additional \$40,000 had been expended. The ores produced were of the base order, and were experimented on with varying success until 1884, when the company erected a mill of its own, which was put in operation the last of that year. Two years later the company increased the capacity of the mill to eighty stamps, and two years later built another mill with 100 stamps, giving the property a combined capacity of 180 stamps. From 1883, and up to the first of May, 1898, at which time the property was



BIMETALLIC MILLS—PHILIPSBURG.

turned over to the consolidated company, the following ores had been shipped:

Bullion to the value of.....	\$ 21,717,864.36
Ore to the value of.....	353,671.79
Slag to the value of.....	21,570.13

A total of.....\$ 22,093,106.28

The Bi-Metallic company purchased properties in 1883 from Mr. McClure for \$1,800,000, but did not commence active development operations for two years, and did not ship any ore until 1887, and in 1889 erected a fifty-stamp mill, enlarging the capacity to 100 stamps in 1890. Four years later a leaching plant was erected and put in operation, which proved a success. Up to 1898, this company had the following output:

Bullion to the value of.....	\$ 6,466,373.42
Ore to the value of.....	395,344.99
Sulphide to the value of.....	361,992.23
Concentrates to the value of.....	44,102.64

A total value of.....\$ 7,267,813.29

This brings the total value of the output of the two companies for the period stated up to \$29,360,919.57, the Granite Mountain company distributing \$12,140,000.00 in dividends, and the Bi-Metallic \$1,630,000.00.



The consolidated properties are model properties, containing miles and miles of tunnel workings, and these give ample evidence of the competent management and the energy and confidence of the proprietors.

These are the largest of the mines at Philipsburg, but there are a number of other very considerable properties, and many that are now in course of development, and which give every promise of becoming rich developers. The organization of the Montana and Bearmouth company, and the erection of their custom mill in the Bearmouth district marked a new era in Montana's mining industry, particularly in the milling methods. The conditions surrounding the organization of this company, and the establishment of this plant were in nowise novel in the west, though the company was the first to meet them in Montana. The whole mining and milling industry of Montana was dependent upon one of two plans of procedure when new camps or mines were started. Either hand sorting of the ore, and shipment to the smelters at Butte or Helena, or operation of a stamp mill, if the ore was free-milling gold ore, or of a concentrator if not, with subsequent shipment of concentrates to the smelters. Both methods were retarding in their effect, either being wasteful in the one case, or excessively expensive in the other. The opening of low-grade mines was prevented, and as was the case in the district tributary to this mill, the low grades of ore were left in the mine as filling when higher grades were taken out.

The Garnet and Coloma mining districts are excellent examples of the class of camps that are found throughout Montana. The conditions in these camps may be taken as fairly average of a dozen or more within the borders of the state.

In Garnet the veins carry gold to the value of \$15 to \$30 per ton, as an average of the whole vein, with occasional pockets and streaks of higher grades. With no facilities for milling the ore, the miners were obliged to resort to two methods; either to mine for the smaller pockets and streaks of first-class ore, rejecting the ore of less than \$25 in value by leaving it under ground, or hand sorting of all. Both methods were expensive, as the cost of mining small veins is greater than that of large veins; and the labor of sorting and sacking added at least \$3 to the expense per ton. A summary of these expenses, which include mining, sorting, sacking, wagon haul to railroad at Bearmouth, freight and smelter charges, shows that the ore must carry at least \$23 per ton, as shipped, to pay expenses. Under such retarding circumstances few of the mines became more than prospects. The Nancy Hanks mine is said to have produced over \$500,000 in gold for its owner, but no others approached this figure. The Shamrock has been a shipper for some time, as have also the Anderson and Magone properties. One mill has been constructed in the Garnet district for treating the ores of the district, but more especially for treatment of the ore from the mines of the owner. This mill could not be classed as a strictly custom mill, since its regular practice was not to buy ores, but to treat the same for owners at a certain charge per day for the mill, with a return of a certain percentage of the gold extracted. The method of milling, stamp and concentration of tailings, with the disadvantageous basis of charges, did but little to assist the development of the

low-grade properties. In the Coloma district, which adjoins the Garnet district on the northwest, the Mammoth Mining company milled its own ores by stamps. The mill never treated custom ores to any extent, and all prospects in that district awaited development until the operation of the custom plant relieved them. In the spring of 1889 the company that established this plant was organized. The plan of organization, as agreed upon, is to act as millmen and purchasers of ore, and, at present, to operate no mines, depending upon the districts adjoining to furnish the ores. In order to encourage development and production, the highest possible prices are paid. A high degree of extraction was to be made, requiring the best metallurgical skill in milling, and all of the facilities furnished by the latest improved machinery and methods. By extending testing it was determined that the safest method of operation



BINMETALLIC MILLS - PHILIPSBURG.

was plate amalgamation, concentration on Wilfleys, and cyaniding of the tailings.

The site selected for the mill was at the point of union of Deep Gulch with Bear Gulch, near the old placer camp of Beartown. At this point the mill is easy of access from Coloma, down Bear Gulch, from Garnet, down Last Chance Gulch, and from the Top o' Deep Mines down Deep Gulch. The longest haul for the miners from any of the developed properties is about seven miles, which is from Coloma, but here, as in all cases, the haul is down hill. The site of the mill is about seven miles from Bearmouth station of the Northern Pacific railroad. Abundance of wood and water is near the mill. The mill cost about \$40,000 as completed.

The purchase rates are as follows: Upon delivery of the ore, and after treatment of the same, 90 per cent. of the assay value in the gold, and in silver, if over 2 ounces per ton, will be paid after deduction for moisture. In addition to this a charge of \$5 per ton is made for treatment. On these figures a fair profit can be made on \$15 ore in Garnet which heretofore was thrown on the waste dump. The expense of hauling is \$1.50 per ton, and of treatment is \$5, leaving a value of \$8.50, of which 90 per cent., or \$7.65, is the net profit of

the owner. The effect of this ready market for such low-grade ores must be very helpful.

There are a number of other mining camps in the county that promise to develop richly, and there are many opportunities offered capital for safe investment in development of promising properties.

The area of Granite county is 1,557 miles, or over 996,000 acres, 103,482 of which are assessed. The county derives its name from the famous Granite mountain silver mine, and was organized in 1893 from parts of Missoula and Deer Lodge counties. Some of the first settlements in the state were made in this county. The county is principally mountainous and timbered, but contains the large and fertile valleys of Flint creek, Willow creek and Hell Gate, and large areas of grazing lands. These valleys are notably good agricultural



GRANITE MILLS—PHILIPSBURG.

regions, and lying in close proximity to the large mining districts, the farmers find a convenient and profitable market for their produce. All grains, grasses, vegetables and root crops are cultivated in the vallies, and yield well, and all small fruits are grown. The more elevated portions are principally cultivated for hay. All cultivated lands are irrigated, and the available land and water are generally appropriated. The area of farming land could be largely increased by a reservoir system, with which the surplus water in the earlier season could be stored. An extensive reservoir system could be established at comparatively small cost. Improved farms with water rights can be purchased in the several valleys for from \$12 to \$35 per acre. Fuel and fencing timber can be had convenient to all farming districts. The principal industry of the county is mining, and while the county suffered from the depression of the silver mining industry, new life is being infused, and the mining camps are now scenes of renewed and great activity.

The future of Granite county and of its county seat, Philipsburg, is not of the speculative order, but is a certainty founded on its proved and extensive resources. The real estate assessment of the county is \$1,205,354, the personal property, \$618,130, and the railroads, \$304,746, making a total valuation for assessment purposes of \$2,128,230.



## Custer County and Miles City.

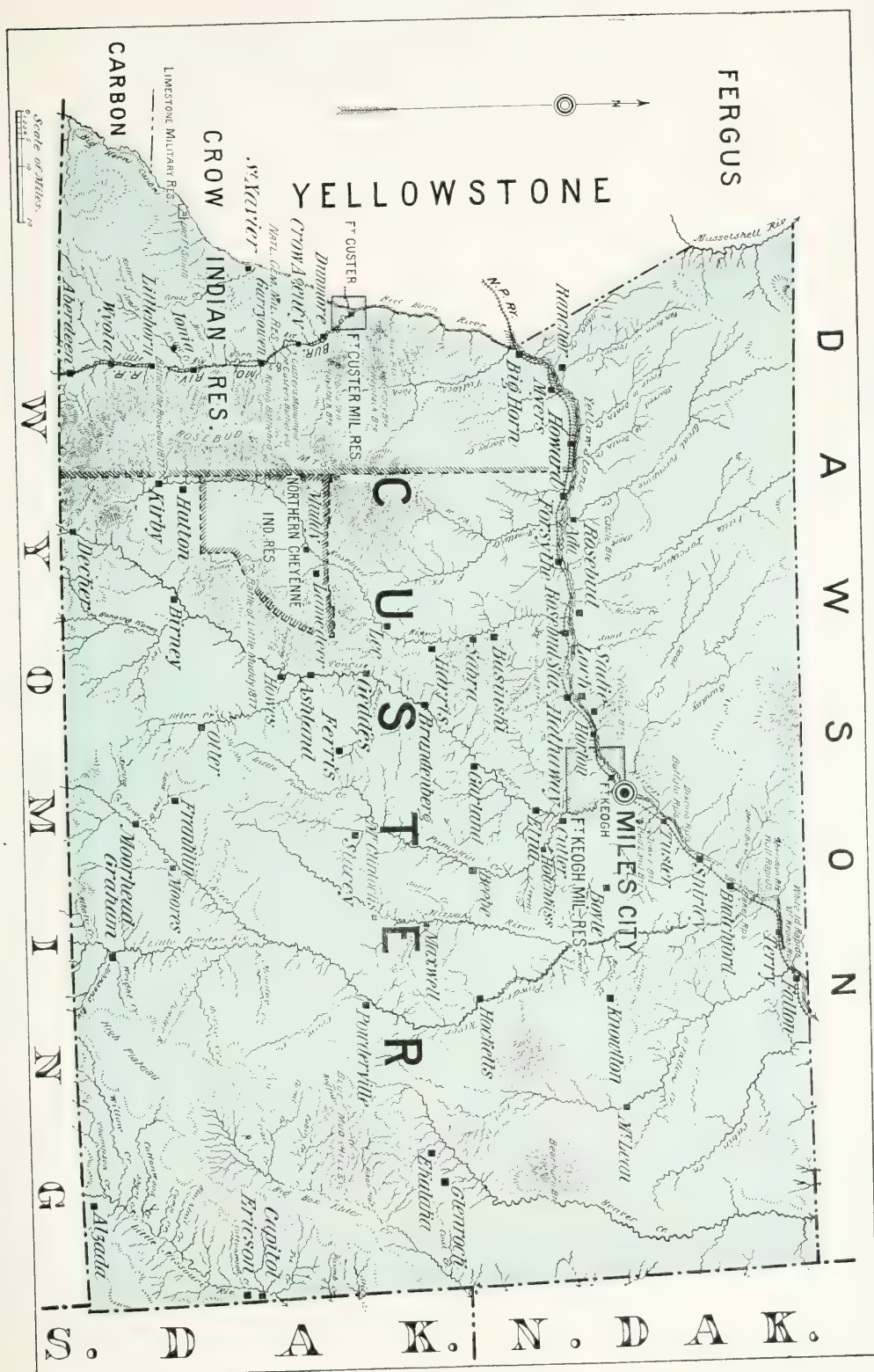
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This Is Not Only the Largest County in Montana, But Is as Well the Largest County in the United States—Sheep, Cattle and Farming Are Its Chief Sources of Wealth Production.

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Custer county lies in the extreme southeastern part of the state, and is one of the few counties of this mountainous country that may be classed as being all prairie, and it enjoys the distinction of being the largest organized county in the Union of states. The name of the county is in memory of General Custer, who, with his troops, were massacred by the Sioux in June, 1876, in the valley of the Little Big Horn, a historical district that is now included in an Indian reservation in the western portion of the county. Since the frontier days, when the county was described as "all the remaining portion" of the then territory of Montana, and had boundaries that outlined the dimensions of a very large state, it has given to her younger sisters a considerable portion of her princely patrimony, but is still the largest county in the state, if not in the nation, her present landed estate being 26,580 square miles. Some idea of the immensity of this county may be obtained by comparing its area with that of some of the larger states. It is larger than West Virginia, more than two-thirds as large as Indiana, and nearly half as large as Illinois.

The topography of the county may generally be described as prairie, though a portion of it is occupied by the Bad Lands, and in the extreme southeastern and southwestern portions there are some mountainous districts. The chief industries of the county at present are those of cattle, sheep and horse raising, and in this general line it ranks with the foremost stock sections of the state. The climatic and other natural conditions will make the county for all time a stock-raising and wool-growing section, but as this is one of the most certainly profitable businesses, the fact is not to be regretted. There are valleys throughout the county, however, where there are many and successful farms, and as irrigation of the more arid lands has made a good start, as the watering of the upper lands is accomplished, general farming will encroach more each year upon the open range, and the agricultural interests will become proportionately more diversified. Aside from the Bad Lands section, the lands of the county are of the richest, and respond, when irrigated, with a growth that is tropical. The aridity is due, not so much to the absence of water as to the limited rainy season, which extends only from the middle of April to the last or middle of May; a scant six or eight weeks, during which time, though copious rains may fall, much of the water passes off in freshets,



# Assessed Valuations.

Real, \$1,726,686; personal, \$3,899,679; railroads, \$1,055,429; total, \$6,681,794.





time, though copious rains may fall, much of the water passes off in freshets, crops unless sustained by the artificial nurture that irrigation supplies. With this help the intense heat of the later summer months only adds to the luxuriance of the growing crop, and thus results far in excess of eastern farming are easily and regularly obtained. Nearly every farmer in the county manages in some way to get water on his land, the irrigation scheme comprising all areas, from a small garden patch to hundreds of acres of alfalfa and native blue-stem. In the majority of instances it is an individual ditch by which the rancher conducts the water from some neighboring creek onto his land. In other instances, when the water supply admits of it, co-operative or com-



MILES CITY.

munity ditches are constructed and maintained by a coterie of neighbors with better results than individual effort can attain, but canals that contemplate the furnishing of water to any considerable number of individuals and over an extended area are costly affairs, and for this reason are scarce. Custer county has only one such, the one familiarly known as "the Tongue River ditch." As long ago as 1882 the idea was conceived of taking out an irrigating ditch from a point on Tongue river about fourteen miles above Miles City, for the purpose of reclaiming the arid valley that stretched between these points. Inadequate attempts at irrigation had demonstrated the fertility of the soil when irrigated, and stimulated the enterprise, and in 1882 a stock company was formed of about fifty stockholders, made up of the business men of Miles

City and the officers of the Fifth United States Infantry, then stationed at Fort Keogh. The line of the canal was surveyed, a portion of it excavated, and a dam constructed at the point selected by the engineer. Owing to faulty construction, and a lack of knowledge of the immense pressure of the confined waters of the river at the time of the spring break-up, the first dam was carried out in the spring of 1883, but nothing daunted, the company went bravely to work again that year and completed another and stronger dam, but this, too, proved inadequate, and was wrecked, though not wholly destroyed, in the spring of 1884. Meanwhile the misfortune of the first year had disheartened many of the stockholders, and financial difficulties ensued,



MILES CITY.

forcing the original company into the hands of a receiver, and in the evolution of events following a new company was formed, composed principally of the old stockholders, and a third dam was built, which still stands as a monument to the dogged perseverance of its projectors. Year by year, as funds could be raised, the excavation of the canal progressed, its onward march marked by the green fields that were in such marked contrast to the adjoining desert, until the original scope of fourteen miles was reached and passed, and its beneficent influences extended down the Yellowstone valley a distance of about eleven miles farther, giving a total length of twenty-five miles to the canal. In 1890 the enterprise was christened the Miles City Canal and Irrigating company, which title it bears today. Although capitalized

for only \$50,000, the work, first and last, has cost about \$150,000, it being the policy of the company to put all earnings into betterment of the plant, changing temporary work to permanent as rapidly as the income will allow. There is tributary to the canal about 25,000 acres of land susceptible to irrigation. On the line of the Miles City canal there are eighty irrigated farms, and the aggregate area of all of them does not exceed 4,000 acres, an average of fifty



NORTH SIDE MAIN STREET—MILES CITY.

acres to the farm. These figures refer only to the land under irrigation, as most of the farmers have range stock interests, and have a large acreage under fence for pasturage.

Land in the valley before the canal was constructed went begging at \$2.50 an acre. It is now worth from \$25 up, according to the location. Some desirable tracts near town are worth \$100 an acre. The quantity of water used in irrigating is estimated at three-quarters of an inch to one inch per acre, according to the condition of the land and the kind of crop, and some are able to do more with a given flow of water than others. The prices charged by the company for water are as follows: On cultivated land, \$2 per acre; on hay land, \$1.50 per acre, and on new land, \$1 per acre. One of our illustrations shows the head gates of the canal and dam, fourteen miles up Tongue river from Miles City. The dam is a massive piece of heavy timber work, with rock ballast, 200 feet wide, and backing up twelve feet of water. The canal is twelve feet wide and about four feet deep, and at present carries about 3,500



inches of water. The work of enlarging and cleaning out is constantly going on, and for this purpose a steam dredger is kept in service.

Miles City, the business center, as well as the county seat, is a lively and growing town of about two thousand people. It is pleasantly located on the Tongue river just above its junction with the Yellowstone, and is composed of residence and business structures that are both modern and substantial, and whose appearance adds to one's impression of the solidity, prosperity and assured future of the town. There are graded streets and curbed and paved gutters, an ample and thoroughly efficient water supply system, and a complete sewage system that extends over the residence portions as well as the



STATE REFORM SCHOOLS - MILES CITY.

business streets, and the darkness of the gloomiest night is dispelled with numerous electric arc lights. Every house is surrounded by a forest of young trees and decorative shrubbery, and every residence has its comfortable lawn. One of the most recently established enterprises, and which is indicative of the go-aheadativeness of the people, is the Custer County Commercial Telephone company, whose scope is the entire county, with over 400 miles of line contemplated. These lines will bring into communication with Miles City every ranch and postoffice in this big county, and enable isolated settlers to make quick demand upon the town for pressing needs.

The Montana State Reform School is located about one mile east of Miles City on land partly donated by the citizens of Miles City and partly pur-

chased by the state, the domain of the school comprising in all one hundred acres, and, with the buildings hereafter described, presenting quite an imposing appearance, especially in the summer season, when the fields are green, the trees and shrubbery luxuriant and all nature smiling from the beneficial effects of irrigation. The buildings thus far constructed are a three-story brick, 100x50, occupied by the director and female officers and assistants, and by the female inmates of the school; one three-story brick building, 104x50, occupied by the boys and male officials; a detached two-story brick building, 40x80, used as a boiler house and laundry, and a two-story brick barn, 40x80, besides several smaller buildings, used as store houses, etc. A complete sys-



CUSTER COUNTY COURT HOUSE—MILES CITY.

tem of sewerage is in operation, discharging into the Yellowstone river, some two miles distant, and an abundant supply of soft and pure water is had from an artesian well. The plant has thus far cost the state about \$60,000, but the results are all in sight, and Montana, though one of the youngest of the sisterhood of states, can feel a reasonable pride in the advancement made in the direction of training and educating the incorrigible, the vagrant and the vicious youth of the state by this institution.

In the matter of fuel Custer county is especially favored. Nature has underlaid the whole county with deposits of lignite coal that ages cannot materially exhaust. This coal is quite unknown to the general world as a fuel, for the reason that it is not adapted to export. Geologists decline to honor it

with the title of coal, but admit that it will be coal sometime. Nevertheless it answers all the purposes of fully matured coal, and in a sparsely timbered country like this, it is a boon that lacks proper appreciation only because of its great abundance and easy procurement. Any one with team and tools can lay in his winter supply of coal from nature's storehouse at no greater cost than the time and labor involved in the undertaking. Its identity as a calcined product of wood is readily recognized, the grain of the wood, the knots, and sometimes the imprint of the leaves being plainly discernable, and quite often fragments of pure and unassimilated resin being in evidence. It crops out everywhere, in "cut banks" and bad-land buttes, in veins of from two to six feet in thickness, and in these exposures can be mined without any expense but labor, but the mines that are regularly and steadily operated for the public



A GRADED SCHOOL—MILES CITY.

supply are below the surface, the deposit being found again and in a denser and more mature condition at a depth of about twenty to twenty-five feet. The lignite of this section is denser and older than the North Dakota deposit, taking the product of the mines at Sims, Dickinson and other places along the line of the Northern Pacific for samples. When freshly mined, our coal is as black and glossy as cannel, but exposure to the air and sunlight causes a "slacking" of the outer skin. It is this feature that prohibits export, as repeated handling and exposure induces disintegration that is more or less rapid, according to the exposure and frequency of handling. As a fuel for cooking or heating, it stands in the highest favor with those who have used it. The cost per ton delivered is from \$2 to \$2.50.

The assessed valuations of the county are: Real estate, \$1,726,686; personal property, \$3,899,679; railroad, \$1,055,429, making a total of \$6,681,794.





two-fifths being mountainous, the latter of which is rich in gold, silver-lead ores and coal. The Yellowstone river, which takes its source in the National Park, flows north and through the county for a distance of about ninety miles, and is bounded on either side by agricultural lands, which are being rapidly settled up with a thrifty class of farmers. The numerous tributaries of the Yellowstone river also have within their valleys large tracts of very productive lands, the most important of which is the Shields River valley. The agricultural district in Park county is extensive in area. It includes the broad and productive valleys of the Yellowstone river and its numerous tributaries, which, with the bench lands adjacent, form a district which will eventually support many thousands of people engaged in the agricultural pursuits. The splendid irrigation system of the upper Yellowstone and Shields River valleys make a failure of crops next to impossible. All kinds of small grain, hay and fruits are successfully produced. Of late it has been shown that the valleys are well adapted for the raising of fruit, including apples and many varieties of berries. Ranchers are now paying considerable attention to the production of fruits, and there are many promising young orchards in the valleys. The bench lands of the Shields River valleys produce an excellent quality of wheat, which is pronounced to be equal to that raised in the famous Red River valley. Probably no locality in the entire west offers such advantages for diversified farming as does Eastern Montana. As yet a large percentage of the tillable lands in the Yellowstone and tributaries are unsettled, but with the development of the mining resources surrounding, every foot will be improved and occupied. Several large irrigating projects are now under way, which, when complete, will reclaim thousands of acres of valuable bench lands.

The foothills adjacent to the agricultural lands offer splendid inducements for those wishing to engage in stock growing. The stock interests of Park county are among the most important of its many industries. Besides the many large flocks of sheep and herds of cattle which range on the mountain sides for many miles in every direction from Livingston, the farmer in the valley engaged in raising grains and vegetables has placed small bands of sheep and cattle upon the surrounding foothills, which from present appearances will be no small aid in making the agricultural pursuit a complete success. Park county offers unusually good opportunities for stock raising on a large scale. The foothills and mountain sides give an abundance of feed during the winter and summer months. The winter season is mild, and it is seldom necessary to provide either hay or shelter during this period. This is a big advantage over the majority of stock-raising localities, and makes it possible to conduct the industry at an unusually good profit.

Mining operations in Park county were first begun in the fall of 1872, when prospectors discovered rich placer diggings in the upper Yellowstone valley. Soon afterward important discoveries were made in the territory now embraced within the famous New World mining district, located in the southern part of the county and adjacent to the National Park. During the few years following important discoveries were made in the mountains ranging along both banks of the Yellowstone river, among which was the discovery of large deposits of coal in the range of mountains to the west of Livingston, and ex-

tending up the river fully fifty miles. In 1882 a part of the Crow reservation, containing rich mineral lands, was thrown open to settlement. Then began an extensive development of the properties previously discovered. The coal deposits attracted the attention of smelting companies in the western portion of the state, and when it was demonstrated that a large percentage of the coal was suitable for coking purposes, the mines were developed and large plants were erected for conducting the product into coke. The greatest rush, however, was to the New World mining district, where during the first ten years after it became a part of the public domain, no less than two thousand claims were located. It is conceded by mining experts that the mineral deposits of Park county are among the richest and most extensive in the west. The mines of the New World district, located in and about Cooke City, have for many years been famous for their wealth, but because of their peculiar situation they have not been provided with railway transportation, and for this reason it has been difficult to operate them to advantage. These mines are located about eighty miles south from Livingston, in the extreme southern part of the county. Cooke City is surrounded on all sides by high mountain ranges, and has no natural outlet except by water grade furnished by Soda Butte creek, which passes through a portion of the National Park. Despite the fact that the means of transportation are so expensive, several mines in this district are being successfully operated. Among them are The Daisy, The United States, The Morning Star, The Alice E, the Great Republic group, Homestake, Moulton, Black Warrior, White Warrior, Little Daisy, Snowslide and many others, and all would soon become important producers were it not for the transportation difficulties. No one familiar with the district has any doubt regarding the great resources or future of the camp. The pioneer settlers of Cooke City were the strongest types of western miners, and in developing the resources of this district they builded for the future. To the south of Livingston, and extending up the valley of the Yellowstone, is another rich mineral district which gives most favorable indications of becoming a great producer of precious metal. During the past few years operations on these mines have been carried on very successfully. With but one or two exceptions the results have been satisfactory, and each month the prospects are growing better. The McCauley Milling company's property ranks as one of the most prosperous. A twenty-stamp mill is kept in continuous operation with very good results. The placer grounds bordering on the Yellowstone river in this locality are very rich, and have been worked successfully for a number of years. In the bluffs adjacent to these placer grounds and extending up the Yellowstone and along the several tributaries are to be found extensive deposits of free-milling quartz. Among the promising and most important mines of the upper Yellowstone may be mentioned the Great Eastern, St. Julian and the McCauley Milling company's properties. These show up immense bodies of free-milling quartz. The ore is gold-bearing and assays from \$20 to \$40 per ton and up. The Natural Bridge district is attracting considerable attention. Almost every portion of Sheep mountain, which is included in the district, has been located, and the prospects for the future of the camp are flattering.



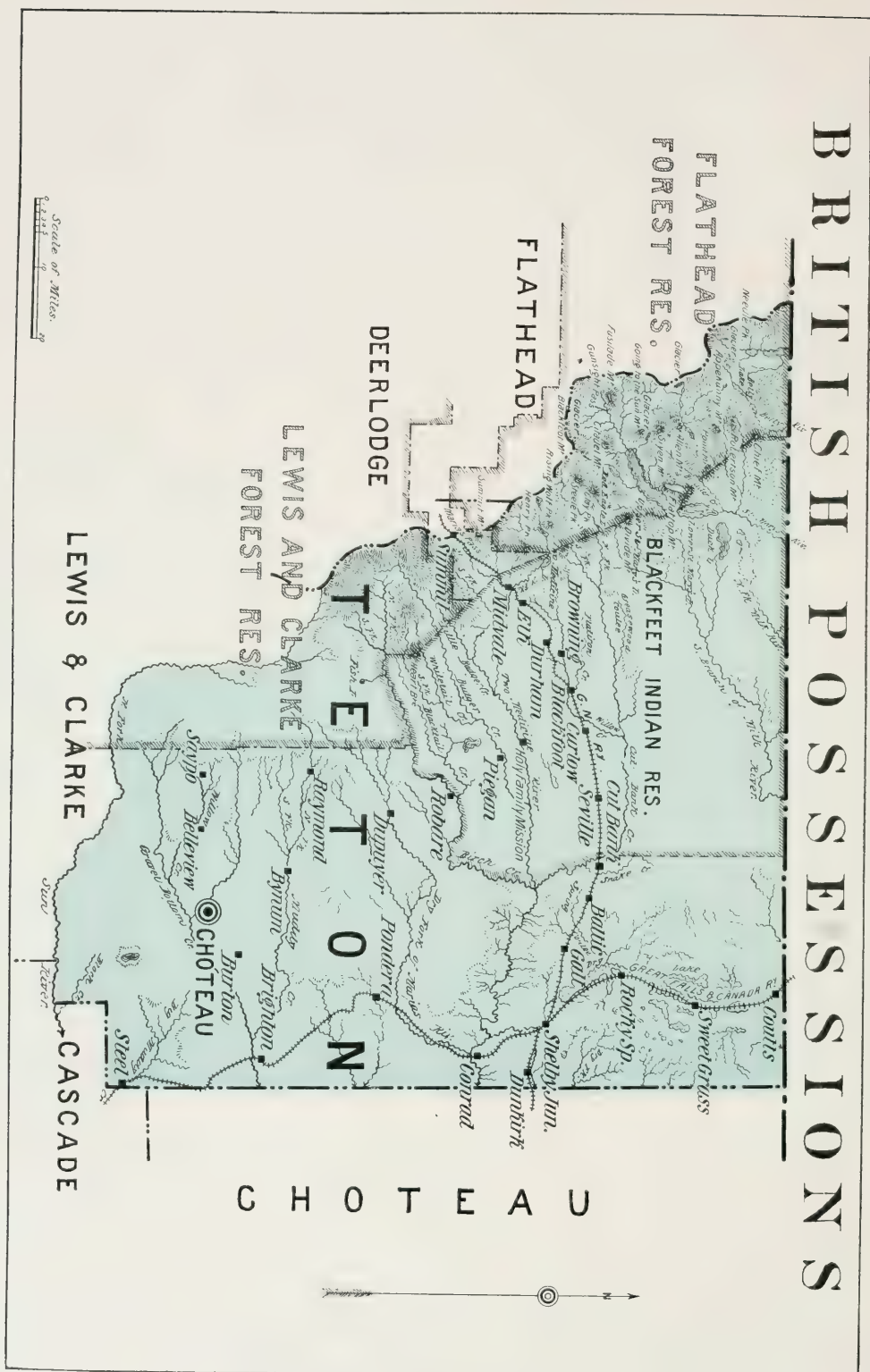
The coke and coal industry in Park county is rapidly assuming large proportions. Two or three quite extensive coking works have been erected, the most important of which are the Montana Coal and Coke company at Horr, and the Yellowstone Coal and Coke company at Cinnabar.

Park county is a logical point for the location of reduction and smelting works. Here is an inexhaustible supply of fluxing ore which, with magnificent water power to be found at several points on the Yellowstone river, makes it possible to reduce the ore at the lowest possible cost.





# BRITISH POSSESSIONS



## Assessed Valuations.

Real, \$761,943; personal, \$1,467,035; railroads, \$661,060; total, \$2,890,038.



## Teton County    ❧    ❧ a New Mineral District.

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The Greater Part of the County One of the Principal Cattle and Sheep Districts of the State—Agricultural Resources—The “Ceded Strip” Promising to Develop a Big Copper Camp.

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Teton county is one of the largest counties in the state, and except for that portion along its western border that is occupied by the east slope of the Rocky mountains, is prairie, range and agricultural lands. The area of the county is 7,900 square miles, and the Blackfeet Indian reservation covers about one-quarter of this, with perhaps half of their allotment in the mountain range. The assessed realty of the county is \$761,943, the personal \$1,467,035, railways \$661,060, making a total of \$2,890,038. Teton county was legally organized in 1893, and now has a population of 5,080. The Great Northern crosses the northern part of the county from east to west, and the Great Falls and Canada passes through the eastern part of the county from the northern to its southern boundary.

Stock and agriculture have been the only resources of the county until the recent ceding of the “Ceded Strip” of the Blackfeet Indian reservation, which was purchased by the government and opened to mineral locations. This strip comprises a couple of million acres, and lies in the mountains in the northwest portion of the county. During the past year there has been considerable development done on the mines of the Strip, and the revelations of the tunnels seem to demonstrate that it is going to prove a great copper-producing camp, and in this event the county will add one of the most profitable of wealth producing industries to its resources. It is estimated that there are 150 square miles of tillable lands not yet irrigated, and the remainder of the county, except the mountains, is chiefly adapted to grazing. The elevation of the valleys range from 3,000 to 4,000 feet. The soil varies from a sandy to a gravelly loam, and from one to six feet in depth. Wheat, oats, barley, rye, flax, timothy, alfalfa and all the vegetables and root crops have been and are being cultivated successfully. All the small fruits, and in some localities apples, are grown.

The depth of snowfall ranges from 12 to 20 inches, but chinook, or warm winds, are frequent, and the snow does not remain continuously. Fuel and timber are obtained from one to forty miles from the farms, and water is obtained at a depth of from 10 to 15 feet. Irrigation is necessary everywhere for cultivation. Hay, oats and barley are considered the best paying crops,

and what is not fed on the ranches is marketed at Choteau, Great Falls and other points. Great Falls will always furnish a good market for the products of the county.

There are good ranges for stock near all the farms, and there is a good field for farmers who desire to combine farming and stock-raising. The Montana Land and Water company has brought out a canal with a capacity of 12,000 inches of water, and has reclaimed about 10,000 acres. A large part of this land has been disposed of to settlers, who have colonized and are cultivating the land. Other large ditches are being built, and much land is being brought under irrigation. A co-operative company is talked of to bring water from the north fork of the Sun river to cover a large and fertile body of land in the southern part of the county.

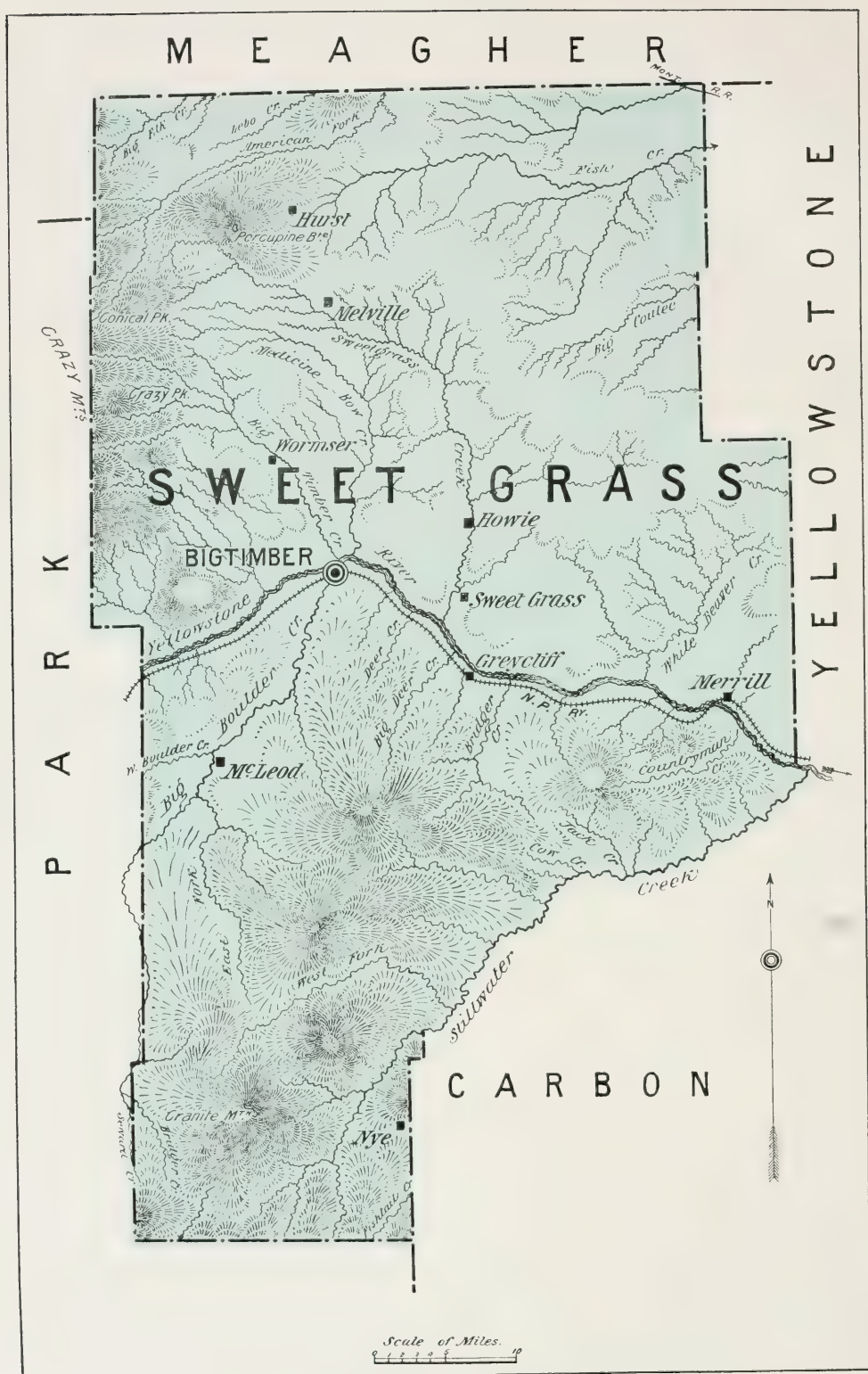
During the past year the Conrad Investment company, of Great Falls, has put in an irrigation system in the neighborhood of Dupuyer that covers over forty thousand acres of fertile lands, and a number of private ditches irrigating single ranches have been put in, the water being appropriated from the numerous streams that flow east from the neighboring mountains. In the raising of cattle and the growth of wool the county is among the first in the state, and while with the rapid increase of irrigation the agricultural products will be greatly increased, the free range is so wide that there will not be any curtailment in these important industries. Great Falls is the market for the products of the county, and will always afford a ready purchaser for all the agricultural products.

Choteau, the county seat, is a busy little town of several hundred population, and is the distributing point for the largest part of the territory within the county.

With the progress of irrigation Teton county will receive the first and most rapid benefits, as it is practically all, except the mountainous portions, susceptible to artificial watering, and as it is next to the source of water supply, will be the first to be served. It will not be a very distant future until the county will be one of the heaviest producers of agricultural products, live stock and wool, in the west, and with the development of its mineral resources, will be one of the wealthiest counties in the state.







#### Assessed Valuations.

Real, \$944,745; personal, \$1,380,964; railroads, \$302,458; total, \$2,628,167.

## Sweet Grass County.

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Large Agricultural Districts With the Most Prolific Soil and Congenial Climate—Rich Quartz and Placer Mines—Coal Measures.

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Sweet Grass county has passed its five-year period, and is now one of the established and prosperous divisions of the state. The population of the county is 3,086. The realty assessment for this year was \$944,745, personal property \$1,380,964, railways \$302,458, making a total of \$2,628,167. The area of the county is about three thousand square miles. It would be hard to find a more prosperous community, or one more contented than those occupying the many and picturesque valleys of the county. Nearly, if not quite all the government land is occupied hereabouts, in quarter sections. The soil is very productive, and there is good range toward the Crazy mountains, where there is also a plentiful supply of both dry and green timber for ranch improvements. In early history of the settlement, the land which is now cultivated so successfully was given over to cattle and horses. Sheep were first introduced in the '70s, and since that time progress has been very rapid. Today the Sweet Grass is fenced from its head to its mouth; the land is well watered, naturally and artificially, and produces abundant crops of hay, vegetables and grain. Cattle and horses have, for the most part, given way to sheep.

The Fish Creek country, one of the finest grazing districts in the state, lies to the east of Melville. The land in the Fish Creek country is, for the most part, more or less broken, and the hills, on which the snow seldom lies more than a day or two at a time, are admirably adapted for winter grazing. The strong chinook winds that sweep the country keep the ridges bare, and it is seldom necessary to feed stock. The Fish Creek country is devoted exclusively to the sheep business. The settlers there have, however, a system of dams and reservoirs in view for storing the water which now runs to waste in the early spring, and as these are built the reclamation of the arid lands will follow, and farming will then be combined with wool-growing.

The territory lying between the West Boulder and the Yellowstone rivers, comprising 44,448.65 acres, has been segregated by the State Arid Land Commission, and a contract let to the Holland Irrigation Canal company for the construction of a canal for its irrigation. Under the same contract 8,200 acres adjacent to Big Timber creek, and about ten miles north of the town of Big Timber, will be reclaimed by a canal. The commission has purchased the canal system of this company, which a few years ago secured the location of a colony of Hollanders at the point mentioned, and hopes within a short period to complete the construction of the system. This

colony has grown into a very prosperous community of about fifty families. When the colonists located on the newly irrigated lands of the company, they had nothing; now they are in possession of well developed farms, enjoying all the conveniences of agricultural communities in the older states, but securing a meed of prosperity that is not nearly equalled by the eastern farmer. The colony has a cheese factory and a demand for its product that exceeds the output. The community has a Dutch Reform church, and there is an excellent public school. Arrangements have been made to extend the colony over all the lands in that district, and the task will be fully accomplished during the next two years. When the settlement of this district is completed, there will be no more prosperous or desirable section in the northwest.

South of Big Timber is the Boulder river and the Boulder valley, the former famous for its unsurpassed trout fishing; the latter for its fertility and beauty. There is no prettier drive than from Big Timber to the Natural Bridge falls, at the head of Boulder river, and there is no better trout fishing in the world than the Boulder river furnishes. A succession of fine, well improved farms cover the distance from Big Timber to the head of the river, a distance of thirty miles. Along the course of the river and its branches all the land is occupied. The settlers are almost exclusively farmers, and they are especially successful. They raise just about everything in the line of fruits, vegetables and cereals that can be raised in Montana. Back from the river, on either side, is an abundance of land as yet used only for grazing purposes, but soon to be as fruitful as that near the river. These lands can be irrigated from the Boulder, and propositions toward that end are rapidly developing. The Natural Bridge and the falls are the scenic wonders of this county, but it is impossible in the space allotted to do them the scantiest justice. The National Park has nothing more grand and wonderful than the Natural Bridge, falls and canyon.

At the southern limits of the county is the mining camp of Independence. The place is quiet now, but prior to 1893 it had all the bustle and life of the typical Montana gold mining camp. The Independence mine yielded nearly \$100,000 in gold in one season, but the financial stringency compelled a cessation of development work which has not yet been resumed. Other quartz and placer mines are being worked in the district with encouraging prospects. Coal has been discovered along the Boulder, a six-foot vein of fine quality being recently opened. A railroad up the Boulder to the National Park—an entirely feasible route—affords an opportunity for the profitable investment of capital, which will not long be neglected. Such a road, besides reaching the National Park, could tap the mining camps of Contact, Independence and Cooke City, and the Natural Bridge falls, which affords an easily improved and large water power.

Big Timber is a substantially built town with more business about it than many an eastern town ten times its size, and its wool market reaches over three million pounds a season. There are also large exports from this point of mutton and beef. An industry that is now underway, and will be in operation the latter part of the coming summer, is a woolen mill, and with the successful operation of this industry others will quickly follow. The successful establishment of a fifty-barrel flour mill has been of inestimable value to the agricultural community, as has the Sweet Grass creamery, which has found a ready market for its entire product. Big Timber has banking, church and school facilities, and enjoys the advantages of a thoroughly modern young city.





# BRITISH POSSESSIONS

FERGUS C H O T E A U

D A W S O N

N. D A K.

FORT PECK INDIAN RES.

GLASGOW

A L L E Y

Scale of Miles.  
0 1 2 3 4 5 6 7 8 9 10

Assessed Valuations.

Real, \$206,487; personal, \$926,214; railroads, \$1,081,200; total, \$2,213,901.

## Valley County    3   3

### Stock and Agriculture.

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**This Is One of the Prairie Counties of the State, and Makes a Good Record of Wealth Production.**

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Valley county is located in the extreme northeastern corner of the state, and of itself would make a sizeable state. It was established as a county in 1893 by detaching and organizing as a separate county all that portion of Dawson county lying north of the Missouri river. Its estimated area is 13,486 square miles, which includes the Fort Peck Indian reservation. The estimated population of the county is 1,500. The principal industry of the county has been, and probably will continue to be stock-raising, although of late years considerable advance has been made in the development of the agricultural resources.

The assessment of the county for this year was, realty \$206,487, personal property \$926,214, railways \$1,081,200, making a total of \$2,213,901. The population of the county is 4,355. The assessment for the year of livestock was as follows: Cattle, 55,440; sheep, 111,629; horses, 5,179.

The Milk river flows through the central part of the county, watering a broad and fertile valley, capable of sustaining a large population in plenty. On either side of this great valley are the rolling prairies that afford the pasture in which lies the foundation of the present and future wealth and prosperity of the people. These grazing lands are adjacent to the valleys, making combined stock-raising and farming the natural method of development of the industries of the county. It is estimated that 300 square miles of the land in this county can be irrigated.

The soil of the valleys is generally a rich black loam that produces abundant crops of grain, grasses, vegetables and root crops. It is said by some that corn can be grown, but experiments have not yet fully determined that it can be profitably raised. In the lower Missouri valley watermelons are grown to perfection. The average snowfall is light—from four to six inches; wood is plentiful along the streams, and water is obtained in wells at from ten to fifty feet. The Missouri river forms the southern boundary of the county, and there is room for a large number of farmers in the valley along this river.

The Great Northern railway traverses the county from east to west, having 204 miles of track in the county.

Irrigation is receiving considerable attention, particularly for hay in connection with cattle and sheep-raising, and irrigation for farming purposes is



beginning to be tried, but is still in its infancy. But in a very few years irrigation will certainly make changes for the better all over the county. The valleys will be turned into great hay fields, and the bench land, breaks and bad lands into pastures and range for stock. The tendency seems to be to run smaller bunches of cattle and sheep, and raise hay enough to guard against the danger of hard winters. Farming in Valley county for more than local consumption is a thing still in future. For an open prairie country, the country is well timbered for fuel, shelter and building purposes, there being both cottonwood and pine timber; cottonwood along nearly all the streams, and pine along the Missouri river breaks. There is also considerable soft coal all over the county.

Coming into the county from the west on the Great Northern railway, which runs east and west through the entire length of the county, the first town is Malta, next to the largest town in the county for population and business. Here during the summer last past was shipped 18,000 beef cattle, 20,000 mutton sheep, 1,000,000 pounds of wool and 175,000 sheep were shorn by two sheep-shearing plants. During the early summer there is a great amount of business done here.

Saco, the next town east of Malta, stands on the open prairie and does a nice business, which is nearly all ranch trade, with the many, but prosperous cattlemen and sheepmen living in the vicinity. Around the town is one of the largest hay-producing bottoms in the county. Beaver creek and Larb creek water thousands of acres of land, on which fine hay is raised.

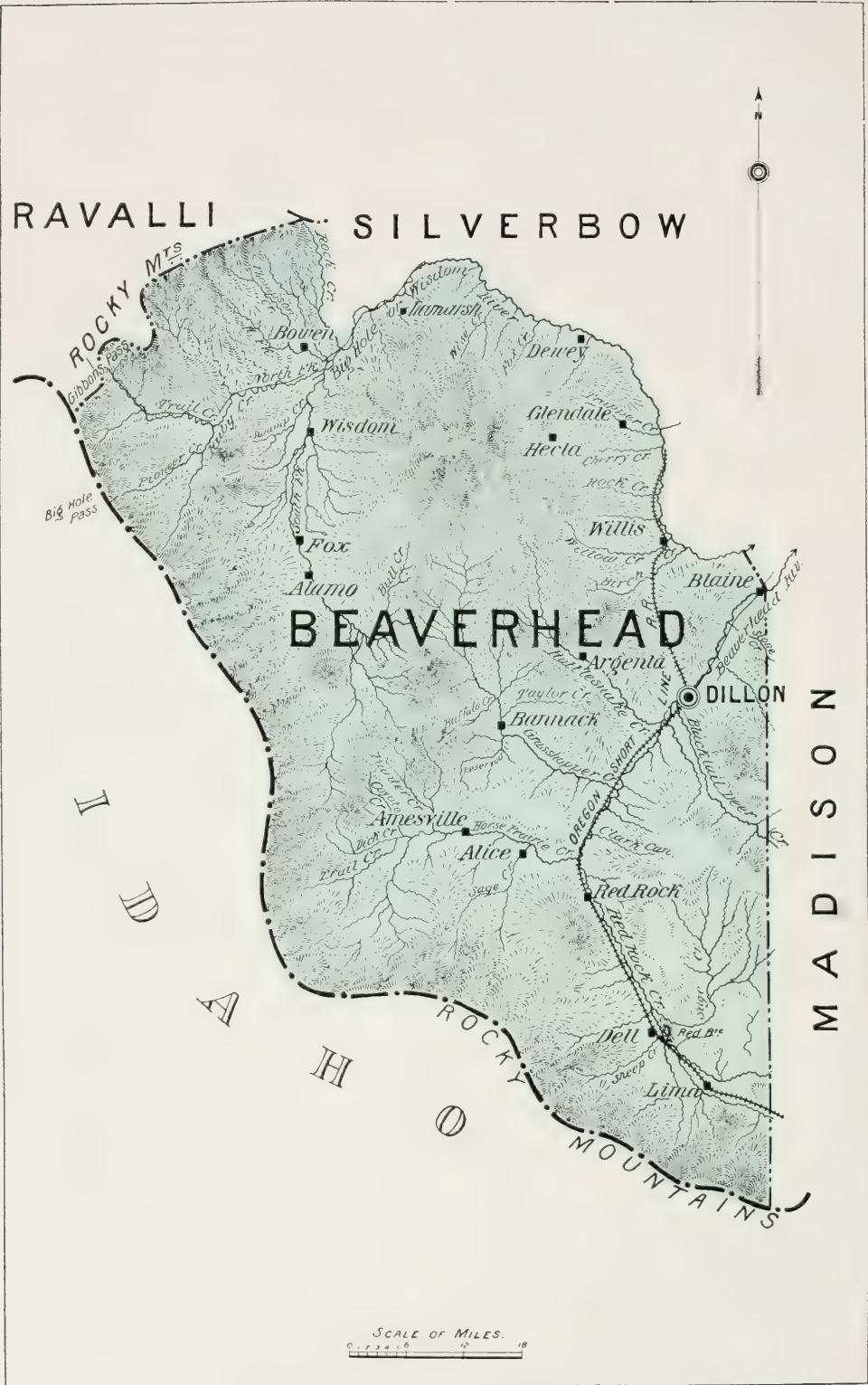
Hinsdale is located on the bank of Milk river, and just across this river is Rock creek, one of the best streams in the county. Considerable effort has been made and is being made to settle up the bottom along this creek, and to put in a dam for the irrigation of farms, and a great many good solid farmers and stockmen have settled in that vicinity lately.

Glasgow, the county seat, is situated on the Milk river, and is the largest town in the county, and is a freight division on the Great Northern railway. This is one of the oldest railroad towns in the county, but has only in the past year or two started to grow and improve. It now has two large hotels, round-house and railway shops, court house and jail, fine school building and school, three churches, Methodist, Catholic and Episcopalian, a jewelry store, etc. One of Glasgow's stores is as fine a building and contains as fine a stock as can be seen in any town a dozen times its size, and bank, court house, jail, school house, and our hotel are buildings that would do credit to any town. The depot is one of the best the railway company has on its line, outside of the cities. The surrounding county is settling up with cattle and sheep men.

Other towns are Culbertson, Nashua and lesser places, all local supply and stock-shipping points.

Valley county has room for thousands of industrious men, and will welcome cordially all who seek a home within her borders. The climate is healthy and vigorous, the resources are abundant, and there is no reason why a man should fail who labors industriously and energetically for success.





**Assessed Valuations.**

Real, \$1,741,515; personal, \$1,795,122; railroads, \$510,120; total, \$4,046,757.



## Beaverhead County and its Resources.

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**A Picturesque District That Is Overflowing With Natural Resources—Gold, Silver, Lead, Copper and Gold Placer and Dredging, Agriculture and Stock Raising Produce Abundant Wealth, and Assure the Future Prosperity of the County.**

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Among the many attractive towns and cities of the state that are nestled among the mountain gulches and valleys, there are none more picturesque, or placed in better environments than Dillon, the county seat of Beaverhead. This section of Montana has an early and interesting history, coming with the first placer hunters, but space will not permit a wandering in that period of romance. Dillon is located very nearly in the center of the county, and has a population of over fifteen hundred. It is especially prosperous and wide awake, and has secured to itself the exclusive trade of the country for a radius of nearly seventy-five miles. The people of Dillon are contented, happy and prosperous. They are possessed of more than ordinarily good dispositions, because, no doubt, of the conditions that obtain—a temperate climate, a clear sky and a pure atmosphere, scented with the varied emanations of the pines and the beautiful wild flowers of the grand old Rockies. There are valleys in the mountains that are surrounded by more rugged and picturesque mountain scenery than the Beaverhead valley, but none that more satisfying to persons who have lived here for a few years, and become accustomed to the grand and imposing mountain ranges which encompass it. Here in this fertile valley, rivaling in its productive capabilities any valley in the west, is the place where Destiny seems to have intended that a prosperous inland city should be built. It is not surprising that Dillon, the capital city of Beaverhead county, should lead. Civilization, agriculture and commerce joined hands, and their joint works are now visible on every hand. The town has passed the period of small and cheap structures, and in their places are the most modern and attractive residences, and the business houses, are substantial structures that would do credit to cities many times its size. Dillon is noted as a "beauty spot," and in its building a polish has been added to the accomplishments of nature. For six months in the year the ditches on either side of the roadways of the city are filled with water, and thousands of trees draw sustenance therefrom and spread their leafy branches in grateful and appreciated shade across the sidewalks. The ditches also furnish water for the numerous and well kept lawns.

No experience can be more delightful than the summer months spent in this charming little city. While at midday the heat sometimes becomes oppressive, the nights are always cool and refreshing, and sleep is always obtainable, no matter how torrid the day may have been. The winters, on the other hand, are deprived of many of the disagreeable features of this season experienced in the lower eastern climates.

The State Normal School is domiciled in one of the finest educational



STATE NORMAL SCHOOL-DILLON.

edifices of the west, and is attracting many new and desirable residents as well as temporary patrons.

Beaverhead is one of the oldest settled counties in the state, and has an area of 4,600 square miles. The greater part of the county is covered by mountains and foothills. The mountains are covered with a heavy growth of timber, and the foothills afford excellent pasturage. The county is well

Fold  
Out

6



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edifices of the west, and is attracting many new and desirable residents as well as temporary patrons.

Beaverhead is one of the oldest settled counties in the state, and has an area of 4,600 square miles. The greater part of the county is covered by mountains and foothills. The mountains are covered with a heavy growth of timber, and the foothills afford excellent pasturage. The county is well







watered. The principal streams are the Beaverhead, Big Hole, Red Rock and Blacktail, and their tributaries. It is along these streams that the fertile valleys lie. The soil in these valleys is a sandy loam, from one to eight feet deep. Farming and stock-raising are the principal resources of the county, aside from mining. The realty assessment of the county is \$1,741,515, the personal \$1,795,122, railroads \$510,120, a total valuation of \$4,046,757. The lands of the county require irrigation, but when watered produce most abundantly. There are still some public lands in the Big Hole district, and on some of the other valleys where water can be diverted, but most of the land of this character has been taken up. There are some excellent locations for reservoirs and canals where considerable areas of fertile lands can be supplied with water. In most cases the cost of building these reservoirs and canals is beyond the reach of indi-



DILLON HIGH SCHOOL.

vidual settlers, and they can only be built by co-operative or public effort. Improved lands with water rights can be purchased for from \$12 to \$75 per acre. The tillable valleys in Beaverhead are generally narrow, but grazing lands on the public domain is convenient to most of the farming districts, and many farmers are adding flocks of sheep and herds of cattle to their possessions. The principal crops grown are oats, barley, potatoes, timothy and alfalfa. Owing to the altitude, which ranges above 6,000 feet, only the smaller fruits are grown. A market for the surplus product is found in the mining districts of Butte and Anaconda. There are large mineral areas in this county, but in only a few places has sufficient work been done to develop paying properties. The minerals produced are gold, silver, copper and lead. The mines and reduction works of the Hecla Consolidated Mining company are located at Glendale, near Melrose. Much attention has lately been given to placer mining by means of dredges, and proven successful. The population of the county is 5,615.

The Utah and Northern provides ample rail communication with the country both north and south.

## Fergus County.

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**Ranching, Farming and Mining Contribute to Make Fergus County the Most Prosperous of Counties.**

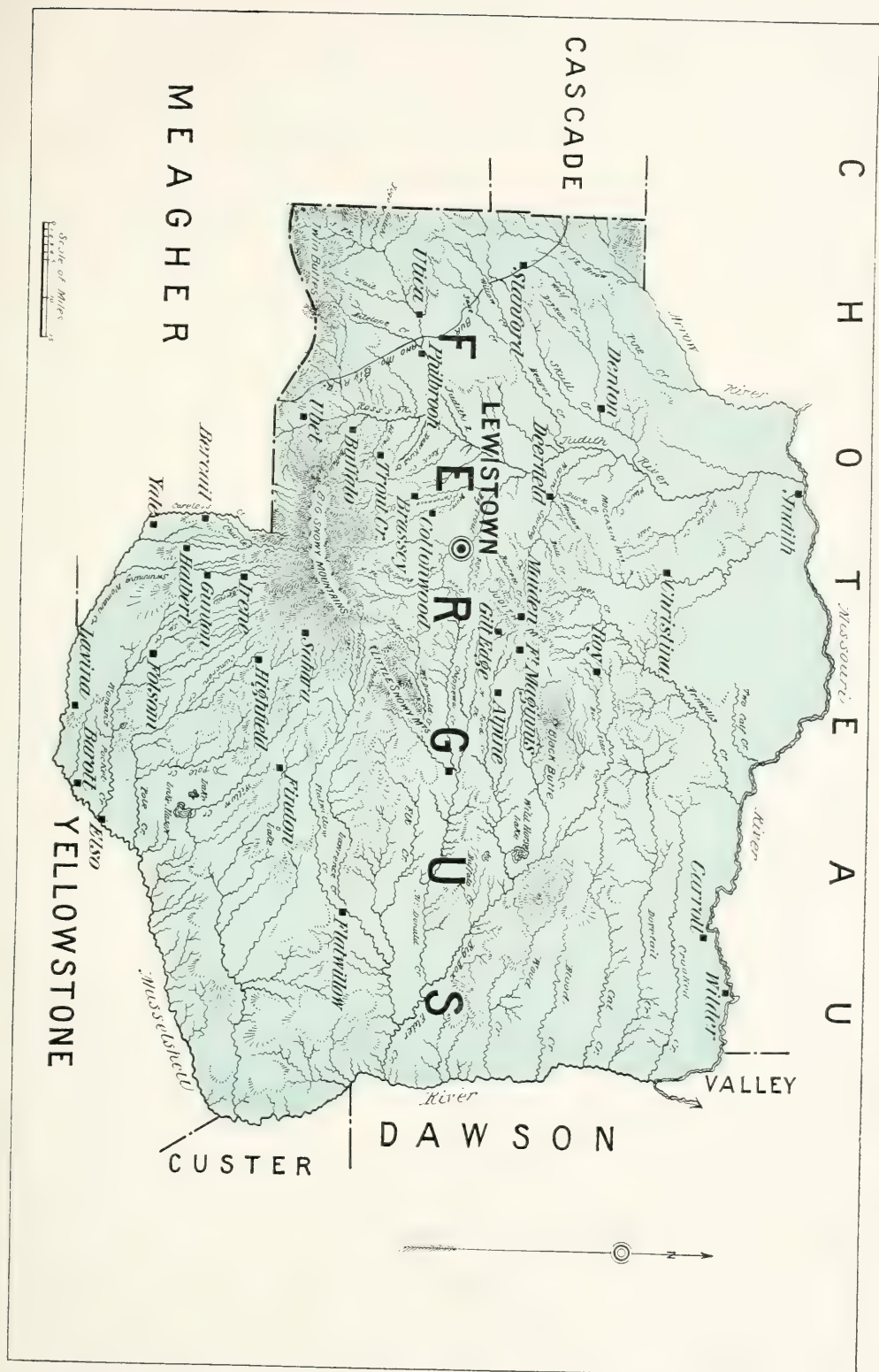
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Fergus county is very nearly in the center of the state, and has an area of 6,762 square miles, with an assessed realty of \$2,108,905, personal property to the amount of \$3,352,567, making a total of \$5,358,874 of assessed valuations. The population of the county is 6,937. In outline the county is nearly octagonal, except that there is a re-entrant angle in place of the southwest side. The northwestern boundary is formed by Arrow river, the northern and northeastern boundaries by the Missouri, the southern and eastern by the Musselshell. On the west the boundary is artificial, though it follows the ridge of the Belt mountains. The diameter of the county north and south is 110 miles, and the length of the county east and west is 125 miles.

It is doubtful if any region of equal area in the world has more varied resources than Fergus county, with its mountains, bench and valleys, its depth and richness of soil, with its crystal mountain streams and broad, majestic rivers, with forests crowning its hills, and precious metals locked in the rock-ribbed sides of its mountains, Fergus county is a land of plenty of which one is entitled to boast.

From the southwestern side, and reaching almost to the center of the county, extend the picturesque range of Big Snowy mountains, and trending northward from the Snowies are the detached spurs known as the Judith and the North and South Moccasins. These divide the county into nearly equal portions, the famous Judith basin to the west and northwest, and the vast country drained by the Musselshell lying to the east and southeast. These mountain spurs seem one vast mass of low-grade gold, silver, copper and lead ores, with here and there a ganglion of dazzling richness, as in the case of the Gilt Edge, New Year and Spotted Horse, from the last of which \$2,500,000 has been taken. Many tons of this ore have been hauled in wagons to the smelters at Great Falls, a distance of 150 miles, and yielded enormous profits. During the past two or three years, since cyaniding gold ores of low grade has proved such a success, Gilt Edge has developed into a prominent gold-producer. In the vicinity and of a large area about it and to the south, there are great deposits of gold ores that will eventually produce many millions of the precious metal, and now offer capital the safest of investment in establishing cyanide plants and working the inexhaustible gold bodies that are to be had for the taking. There are also many lead, silver and copper properties that will become producers as soon as railway facilities are secured, and that will not be in a distant future.

An excellent quality of coal is found at various places in these mountains. The McDonald Creek mine has been worked more than any other. This



# Assessed Valuations.

Real, \$2,108,905; personal, \$3,352,567; total, \$5,358,784.





industry is as yet, however, comparatively undeveloped. The numerous mountain streams of this central portion furnish many opportunities for the economical improvement of water-powers, and these will some day be an important factor in inducing the establishment of manufacturing industries, and they also furnish abundant and easily diverted water for irrigation of the fertile contiguous lands. The Lewistown flour mills, electric lighting plant and brewery receive their motive power from the east fork of the Judith river, an electric plant that receives its motive power for generating from the river. Lumber is manufactured in various portions of the county. No other industry is developing more rapidly than agriculture. Wheat, oats, rye and barley, timothy and all kinds of vegetables are produced in abundance. In many of the valleys and on the bench lands at the foot of the Snowies, no irrigation is required, but in all parts of the county the rich black loam produces the more abundantly when irrigated.

The first industry to be developed in the county was cattle raising, and is now second in importance to wool-growing, in the latter of which this county is the first in the state. The wool product of this year was some four million pounds, and the number of sheep and cattle ranged make the county rank as one of the first wool and mutton and beef counties of the state. Large areas of the county, such as the Judith basin, are devoted to agriculture, and this line of industry is far in advance of many other counties of the state. The agriculturists of Fergus county are rated among the most prosperous in the state.

Lewistown, the county seat, is the largest town in the state not on a railroad. Its population is 1,200. It has three large churches, two first-class hotels, two excellent newspapers, two banks, a free library, United States land office and all the other business institutions of a live and progressive town. Lewistown is the county seat, and has a court house that cost \$7,000, and a new public building erected at a cost of \$15,000. Eight teachers are employed in the public schools. There is a tri-weekly stage service to Fort Benton, a distance of 100 miles, time fourteen hours; and a daily stage service to Great Falls, 120 miles, time twenty-five hours; and another daily line to Leadboro, a distance of 90 miles, twenty-two hours; and to Billings, 140 miles, time two days. There is a long-distance telephone communication with Great Falls, Billings and all outside points. The freighting of wool to Great Falls and merchandise on the return trip provides profitable employment for a large number of teams and men.

Stanford, Philbrook and Utica are villages on the stage road between Lewistown and Great Falls. Utica has a population of 150, and receives a large trade from the surrounding agricultural and grazing country. Ubet is a small village in the "Gap" between Belt and the Big Snowy mountains. Gilt Edge is a busy gold camp sixteen miles east of Lewistown. Its population is about 250, and is steadily increasing. Maiden is another gold camp where there are several good properties that give great promise for the future. There are other villages in different parts of the county that are the local market points for their respective neighborhoods.

The streams of Fergus county abound in fish, the forest and prairies in game, and the scenery in the mountains and valleys is lovely beyond description.

The only hindrance to the full development of the diversified industries and the many resources of the county is the lack of railway facilities, but it is certain that the next year will remove this obstacle. Then Fergus county will take front rank among the counties of the state.

## Dawson County.

One of the Largest Counties of the State That Produces Annually Great Values in Cattle, Sheep and Horses.

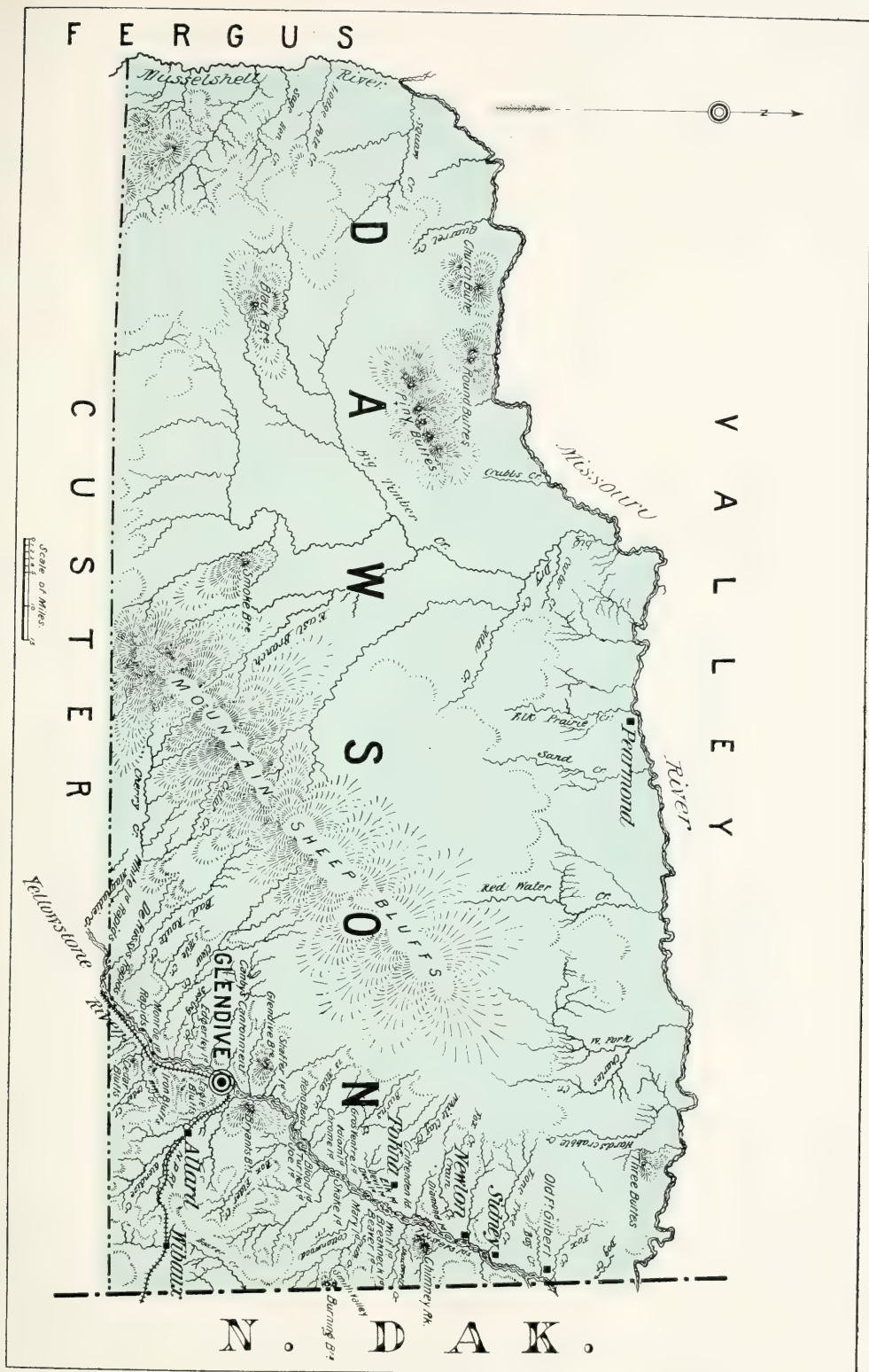
Dawson, one of the prairie counties of the state, has an area of 13,194 square miles, and a total assessment of \$2,549,933, divided as follows: Realty,



BIRDSEYE VIEW OF GLENDIVE.

\$506,307; personal property, \$1,679,492; railways, \$363,480. The population of the county is 2,443. The entire area of the county is especially adapted to stock-raising. The vast ranges with their succulent grasses, and numerous valleys, sheltered from the storms by the many hills, makes an ideal range for stock of all kinds. For the first fifteen years of its existence, the large companies had the ranges well filled, but for the past several years smaller outfits have been locating in the country, and the small stock-grower, who carries on diversified farming, will in the future be king in Dawson county. The numerous large and small valleys lie at a lower elevation, have a higher





#### Assessed Valuations.

Real, \$506,307; personal, \$1,679,492; railroads, \$363,480; total, \$2,549,933.



temperature than any other part of the state, are well watered by creeks and springs, and are capable of producing all the crops of hay, grain and fruits adapted to the latitude and altitude. Almost the entire farming lands require irrigation, but some bottom lands along the Yellowstone have been cultivated without, but without irrigation farming is very successfully carried on, and with artificial watering thousands of acres now unprofitable could be made productive and splendid markets found within easy reach. Irrigation is as yet in its infancy, but where tried splendid results have been obtained. The Yellowstone furnishes abundant water for that purpose, and by the diversion



THE DAWSON COUNTY COURT HOUSE.

of its waters large areas of land in the valley can be brought under contemplation. Oats have yielded as high as fifty bushels to the acre, while wheat, corn and barley are equal in yield to the best anywhere, and the lack of shipping facilities is the only reason why they are not more extensively raised. As an agricultural district, the lower Yellowstone valley is largely undeveloped. Enough settlers have been engaged for the past ten years in crop-raising for profit to demonstrate that it is no longer a theory, but a well established fact that the valley returns a far more bountiful yield, in proportion to the cost of production, than any of the so-called agricultural belt states. All the farming lands in the county have large and excellent stock ranges adjacent, and combined stock-raising and farming is destined to be the basis of the



future prosperity of the county. The Northern Pacific railroad has sixty-three miles of road in the county. The Great Northern also skirts along the northern boundary of the county for a long distance. Improved lands with water rights are held at \$20 to \$30 per acre. Eleven school districts are established in the county, and all of the schools are in a prosperous condition, with every modern equipment requisite to the best methods of instruction. The affairs of the county are wisely and economically managed, and county warrants in all funds are at par.

Nestling in a natural amphitheatre, surrounded on almost every side by picturesquely rugged hills, through which the broad, majestic Yellowstone river sweeps its way, the charming little city of Glendive appears to the wearied traveler from east or west like a veritable oasis. In its miniature valley location, the famous river skirts the western limits of the town, and presents a feature of interesting change with the seasons of the year. From the banks



A GLENDIVE SCHOOL HOUSE.

of the stream, and extending almost to the boundaries of the abruptly towering bluffs, the broad streets and avenues of the town are laid out to the compass' cardinal points. Parallelling the main street, or more correctly, Merrill avenue, the Northern Pacific railroad lines are laid, and east and west the prospect is beautified by well-kept homes dotting here and there in the immediate distance, field upon field of emerald green. It is a delightful place to spend the summer months, and in the region around, game of many kinds abound. The habiliments of the town are numerous, and the public edifices would do credit to any place quadruple its size. Glendive has had a sure and stable growth, untarnished by the deceptive influences of boom methods, and its first settlers who came early in 1880, as also those that followed, were nothing if not practical. Glendive continued to grow, and handsome houses speedily took the place of frontier tents and log shacks, until today there is no more substantially built and neatly kept town of its size anywhere.

Along the entire length of Merrill avenue, attractive brick stores and spacious frame business houses rear their heads in undeniable testimony to the city's commercial prosperity, while the aesthetic taste and culture of the people find expression in the artistic arrangement of their homes in well-kept lawns and trees and flowers. This pearl of the Yellowstone is not only attractive to the eye, but its location in the midst of a vast surrounding stock country, extending scores of miles in every direction, makes it a place of great commercial importance. The importance of the place has been enhanced by the location of the large machine shops, division headquarters and round-house of the Northern Pacific railway, all of which give employment to many of its citizens. Its educational and religious facilities are excellent; splendid schools and churches being appreciated to the utmost, testifying also to the morality and high standard of the population. Social, literary and fraternal societies are in a flourishing condition, while the public conveniences of the town are unexcelled. Glendive is essentially a residence city. There are no manufacturing establishments at present established within its limits, but the interests of the people extend throughout the county, in sheep, cattle and land investment, and as Glendive is the distributing point for the entire region, it is natural that it should be the permanent residence seat of the county.

## Jefferson County.

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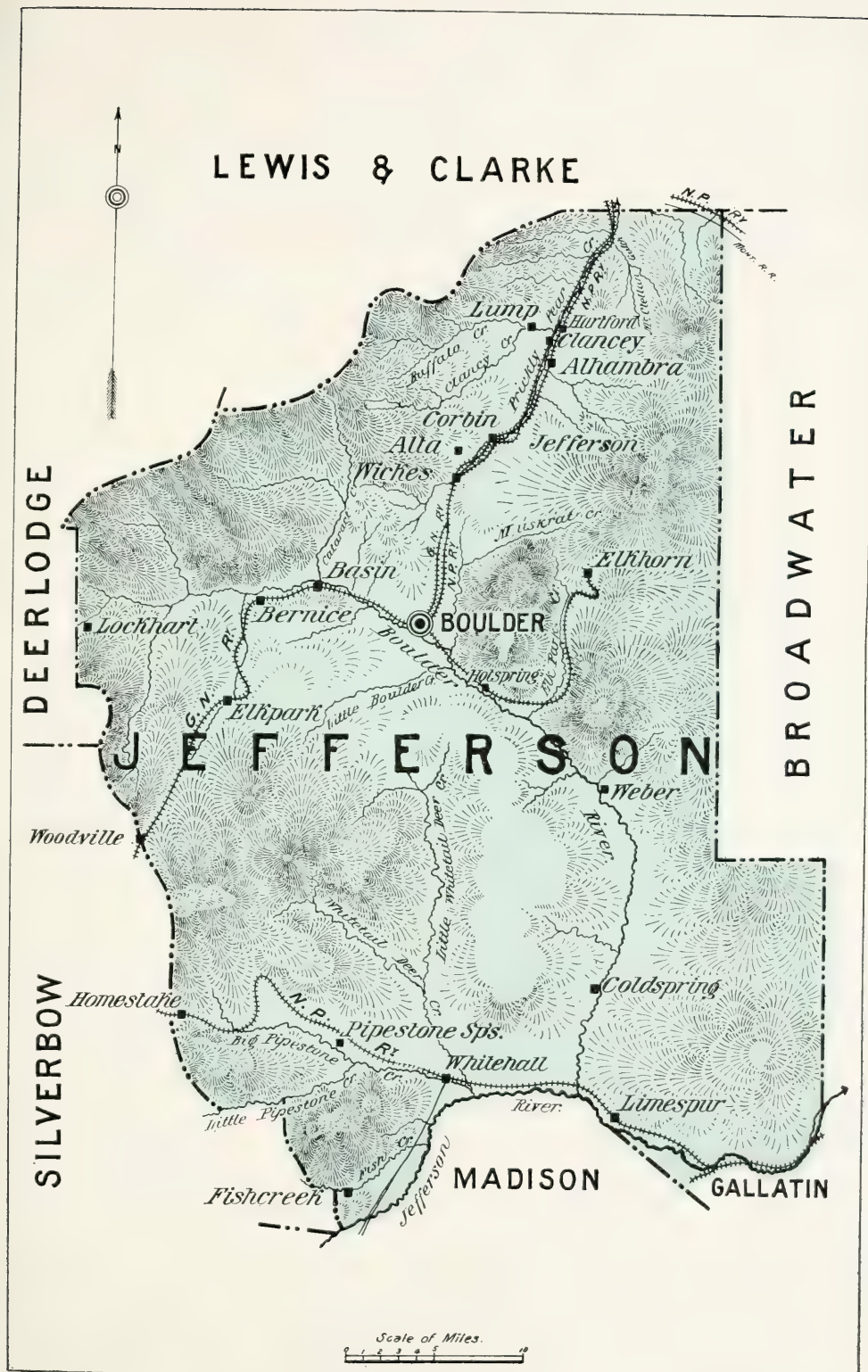
**Mining and Agriculture—Much Undeveloped Mineral Area That Will Eventually Make Jefferson One of the Richest of Counties.**

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Jefferson county has an area of 1,600 square miles, and the greater part of this is mineral land. The realty assessment of the county is \$1,883,773, personal property \$950,487, railways \$837,076, making a total of \$3,671,336. The population of the county is 5,330.

A very considerable portion of the county is mountainous, but it has a number of fine agricultural valleys which are very productive, and located as they are adjacent to the mining districts, the farmers find a ready-cash market. The county also contains a considerable area of good grazing lands. The principal valleys are the Boulder, Jefferson and the Prickly Pear. Their altitude is generally from 4,000 to 5,000 feet. All agricultural lands require irrigation, and the available waters are generally appropriated. The soil is a black sandy loam, ranging from a few inches to four feet in depth. Wheat, oats, barley, potatoes and all root crops, grasses and vegetables are grown abundantly, and small fruits are grown in all the valleys. Timber for fuel and fencing is usually obtained at four to ten miles from the farms. In some parts there are excellent stock ranges convenient to the farms, but as much of the natural shelter is fenced in, the stock is limited to the number that can be sheltered and fed on the farms when the severest weather makes it necessary. Garden farming near the mining camps is a highly profitable industry. Some hay and grain is shipped to Helena. The area of cultivated lands could be increased with a storage system for water. Fairly improved farms with water rights can be bought in the different valleys at \$12 to \$25 per acre. The principal industry of the county, however, is mining for the gold and silver of which this county is a great producer. This is one of the very best counties to prospect in, from the fact that the veins of mineral are easily discovered, and when developed are great producers. In this county, as in all mining districts, the poverty of the prospectors has delayed the development of the mines, but in the last two or three years the attention of capitalists has been successfully directed to the rich veins of ore that await the investment of capital, and the application of labor to return rich rewards, and as a consequence many paying properties are now working. During the last year prospects around Basin have been developed into mines, and the field has hardly been touched. There are few places where there is such an inviting field for the investment of capital in the mining industry, as in the district





**Assessed Valuations.**

Real, \$1,883,773; personal, \$950,487; railroads, \$837,076; total, \$3,671,336.



surrounding Basin. Another old mining camp that is being once more brought into prominence as a producer is Lump Gulch. Much work was done in this camp in the earlier days of the state, and a very considerable amount of money was taken out, but owing to the expensive methods of treatment for the ore, the mines were closed down. Now, with modern and cheaper methods, these mines are again pouring their wealth into the channels of trade. Other mining places are Elkhorn, Whitehall, Corbin and Wickes. Copper and lead are also important productions of this county. There are in the county some large bodies of low-grade ore that it is thought can be worked at a large profit, if the work is done on a sufficiently large scale. The mining camps of this county are prosperous, and support thousands of people, and there is room for thousands more. Men with money can find no better place to invest it profitably than in the mining districts of Jefferson county.

Several of the mineral districts of the county that have been considerably developed, and have proved to have rich and permanent mines, have been prevented from producing by the fact that the ores, while rich in precious metals, carried a large percentage of zinc, and the penalties imposed by the smelters for handling such ores has prevented their operation. There is now good promise that this obstacle is to be removed in the very near future, for the county is to have a smelter constructed for reducing zinc ores, and after it is in operation, instead of having the zinc bring the mine owner a penalty, it will add to the value of his ores. As soon as this plant is put in operation, and mining assurances are that it will not be later than the last of the coming year, mining in the zinc districts will experience a great boom, and the developed mines will be worked to their full capacity, and many new properties will be speedily developed.

Boulder, the county seat, is situated in the Boulder valley, and may be reached by the line of the Great Northern railway, or by the Northern Pacific railway from Helena. The population of Boulder is about 1,200. This little city has a fine court house, good schools, numerous churches, and the State Deaf and Dumb School. The famous Boulder Hot Springs are here, with ample and excellent hotel and bathing accommodations. There are also hot springs at Alhambra and at Pipestone, to which many resort for health and pleasure.

There are good schools in every locality, and good opportunities for small industries in some of the towns.



## Meagher County ' ' ' and its Resources.

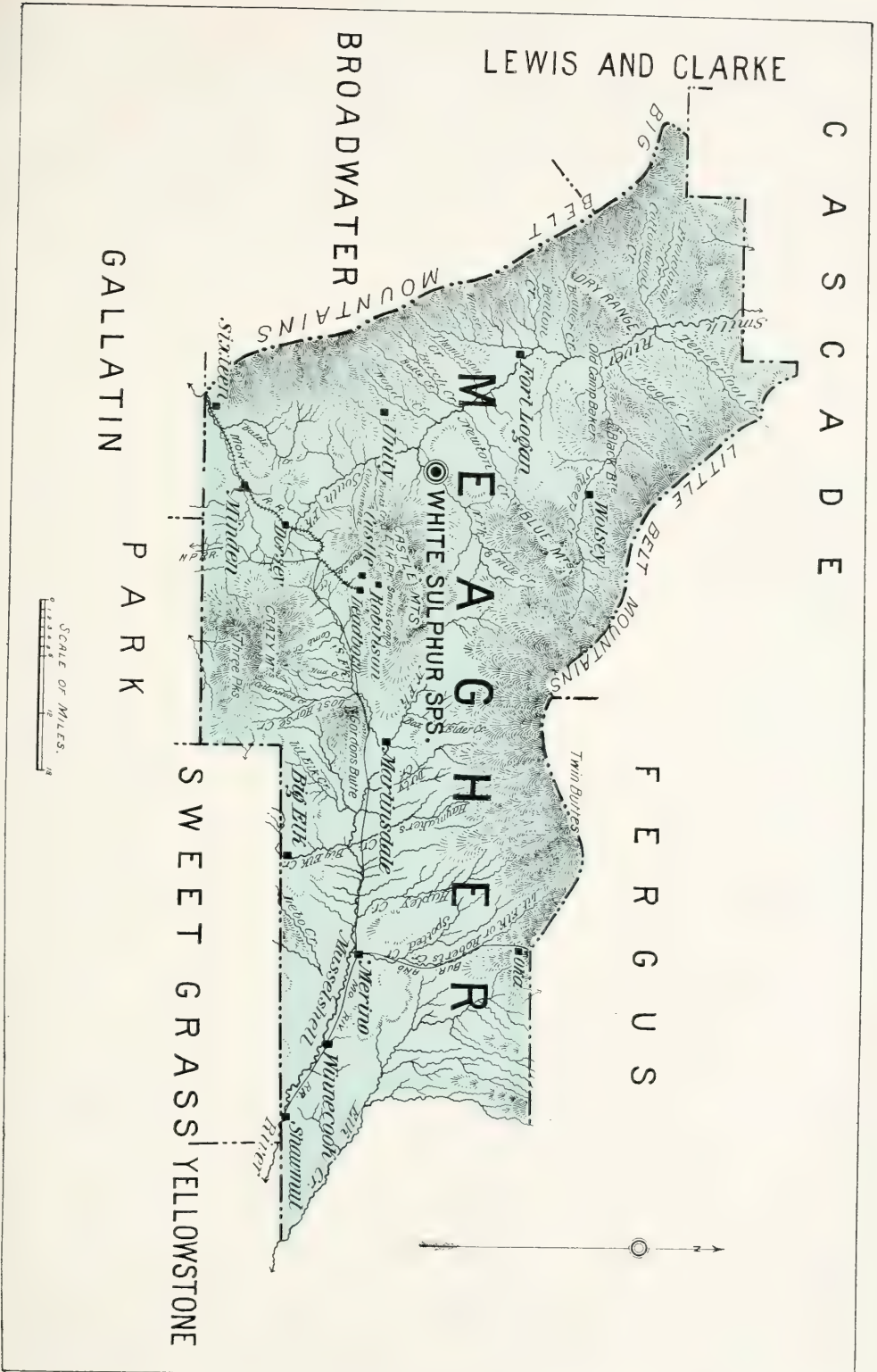
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**Agriculture, Stock and Mining the Resources That Make This One of the  
Richest and Best Sections of the State.**

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Meagher county was named in honor of Thomas F. Meagher, who was for some years secretary of the territory of Montana. This county had originally about 10,000 square miles, but its rich valleys and thriving towns tempted men to seek its division, until now it has about 2,500 square miles, giving a total acreage of 2,650,000. The realty assessment for the year was \$1,376,740, personal property \$1,882,810, and railways \$56,064, making a total of \$3,315,614. The population of the county according to the present government census, is 2,526. In proportion to its area no region in the state produces more grass and hay, and consequently can support, as it does, a great number of cattle and sheep. The wool, mutton and beef output is greater in proportion to its area than other sections, and there is no stock district where the winter feed problem has been so successfully and easily solved. Although it is a district of big flocks and herds, every animal is provided with enclosure and ample hay for winter. Meagher is also a good grain-growing region, and blue joint meadows are secured wherever water can be secured for irrigation. The cultivation of alfalfa has been increasing rapidly the past few years, and is proving a cheap and abundant provender for winter. There is no finer or more productive rural region on the continent, and this is made evident by the per capita property valuation. The principal valleys are the Smith River and Musselshell. The soil is generally a sandy loam from seven inches to seven feet in depth, and produces abundant crops of all grains, grasses and vegetables. A portion of Meagher county is the oldest habitation of the white man known in the Rocky Mountain region, and owing to its health-giving mineral waters and its salubrious climate is now and always has been a favorite with the homeseeker, and as a consequence the land is well settled by an industrious, prosperous and intelligent people.

The county was once famous for its rich placer fields, and it now bids fair to become equally famous for its quartz mines. Owing to its lack of transportation facilities, little was done in the way of developing its mineral deposits until the past year or two, when the construction of the Montana Midland brought its mountainous districts into easy communication with outside distributing points. The district known as the Smith River water-



#### Assessed Valuations.

Real, \$1,376,740; personal, \$1,882,810; railroads, \$56,064; total, \$3,315,614.





shed bids fair to become a rival of Butte in the production of copper, and will also have as important products gold, silver, lead and iron. But aside from this district there are other portions of the county that are rich in deposits of the different minerals, and there are several large districts that have almost unlimited deposits of low-grade cyanide gold ore that within the next few years will develop into a richly productive industry. All through these mineral districts are many opportunities for the most economical development of water powers. Near White Sulphur Springs an iron mine is being opened, and will be operated extensively during the coming season, that is capable of producing all the iron that the state can consume for some time to come. Portions of Meagher county contain great coal measures, and there is an abundance of the finest building stones. Game abounds in the mountains of the Smith river, and the streams afford the best fishing. The breezes of the summer are delightfully cool, and the winds of the winter dissipate the snow and moderate the temperature.

The county, taken as a whole, is the most prolific and reliable in its resources, and in the past its people have been among the most prosperous and contented in the state, and with its topography warranting the best of future transportation facilities, and the consequent development of its resources, it will of necessity become one of the counties of which prosperous Montana will feel especially proud.

White Sulphur Springs, the county seat and the location of the noted springs, is the business center and the distributing point for the county, is lighted with electricity, owns its own waterworks system, and is not only a lively business point, but is one of the most congenial resident localities of the state.

## Choteau County.

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Choteau Is One of the Largest Counties in the State, and Also One of the Chief Cattle and Sheep Producing Districts—Large Agricultural Area.

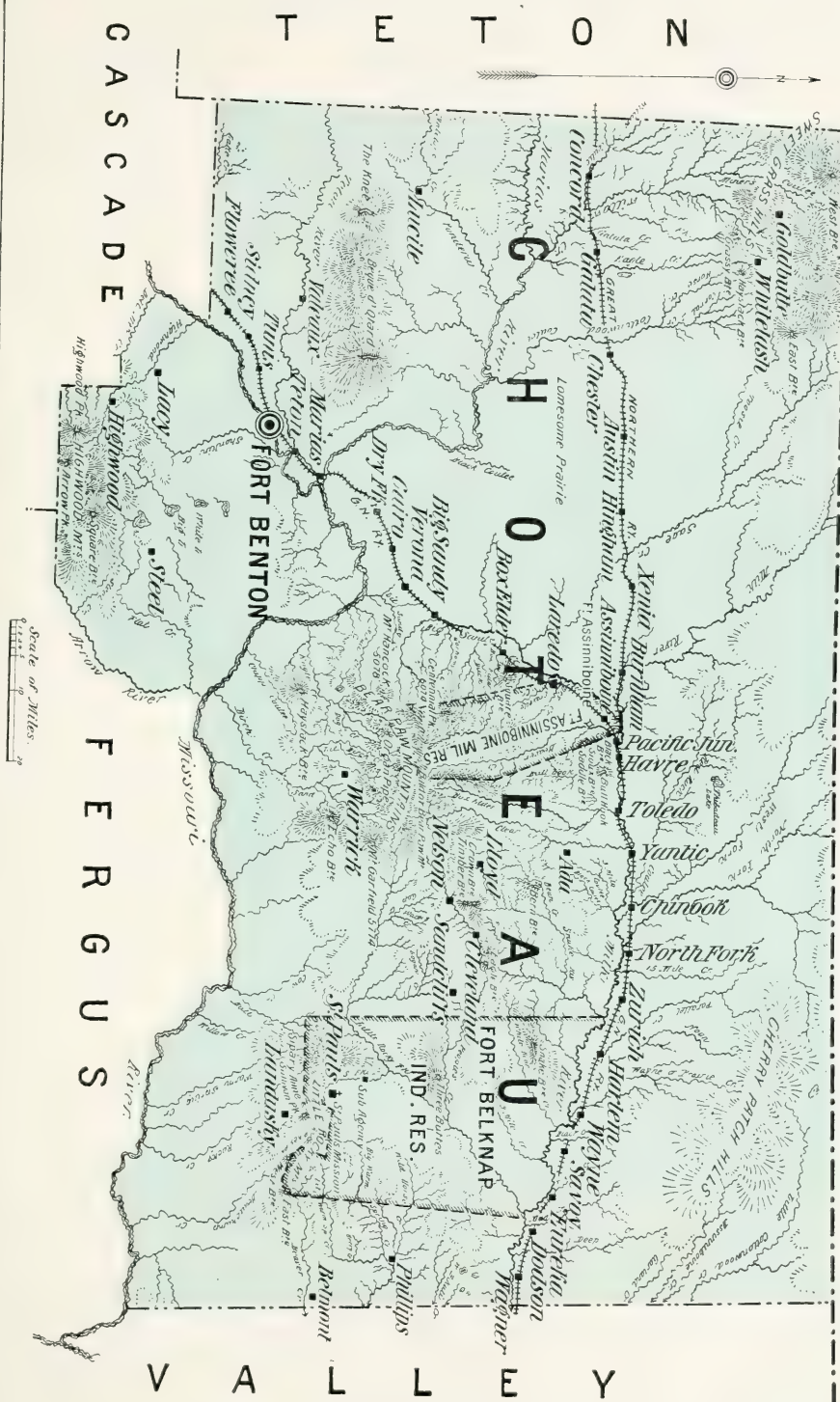
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Choteau county, named in honor of Pierre Choteau, the noted early-day explorer and trader, is one of the largest counties in the state, having an area of 14,835 square miles, with a total assessed valuation of \$6,314,794, divided in this way: Realty, \$1,181,951; personal property, \$3,689,523; railways, \$1,442,819. The population of the county is 10,996. Topographically the county is composed of valleys and undulating plains, with the Bear Paw mountains rising near the center, and the Sweet Grass hills in the northwest. This county is well watered by the numerous rivers and streams that flow through it. The principal river is the Missouri, and the streams the Marais, Milk river, Teton and their tributaries. Wide and fertile valleys lie along these streams. The soil varies from a sandy black loam on the uplands and near the mountains to a still clay soil in the bottoms, the depth of which ranges from a few inches to four or five feet. Irrigation is necessary to cultivation of the soil, and so far water has only been diverted on a small portion of the land, but the soil is naturally very productive. The farm areas range from 2,500 to 5,000 feet elevation. Wheat, oats, barley, rye and all the grasses and root crops do exceedingly well, and in some places corn is raised. Fairly improved farms with water rights sell for \$10 per acre and upward. Lumber sells from \$10 to \$20 per thousand. Water is obtained at a depth of from ten to forty feet. There are two large irrigating canals in this county, but all the lands covered have been disposed of. There is yet abundance of unappropriated water. Good inducements are offered to settlers where irrigated farms can be secured and operated in connection with stock-growing. But stock-growing is the principal industry in the county. The larger part of the county is grazing land, and more than 150,000 head of cattle and more than half a million head of sheep range and fatten on the rich and nutritious grasses that cover the uplands.

There are some gold mining claims on the Sweet Grass hills, but they have not been sufficiently developed to determine their value.

Fort Benton, the county seat, is situated on the line of the Great Northern railway, and is at the head of navigation on the Missouri river. Before the advent of the railroads in the state this was the great distributing point of Montana. It contains a population of 600, and has a municipal system of waterworks, good schools, churches and the fraternal societies are well represented. The other principal towns in the county are Chinook, the center of

# BRITISH POSSESSIONS



## Assessed Valuations.

Real, \$1,181,951; personal, \$3,689,523; railroads \$1,442,819; total, \$6,314,794.





the great sheep-raising district, with a population of 500, and Havre, the junction of the Montana Central and the main line of the Great Northern railway, a growing and thriving town of 500.

While Choteau county does not present the diversified resources of some of the other counties of the state, its future is both promising and assured. Though little development work has been done in the Sweet Grass hills, enough has been done to prove the existence of rich gold and copper deposits and extensive measures of coal that equal the noted Lethbridge product. The gold mines of the Little Rockies are also showing up well. But much the larger part of the county's great area will always be devoted to stock-grazing, and in this industry the county will always rank prominently. As will have been noted, the county now contains thousands of head of cattle, horses and sheep, but its ranges, with their abundance of nutritious grasses, will support many additional thousands, and those seeking locations for stock-raising in any of its branches, should look over the opportunities offered by Choteau county. The county embraces the area of a good sized state, and its present population and assessed acreage show the opportunities open for those who may be seeking remunerative stock-raising locations.

The county will always occupy a prominent position in the history of the state, as its county seat was during all the years of its territorial existence, the commercial center and distributing point for hundreds of miles north, west and south, all merchandise for this great area being brought to Benton, the head of navigation, with the now almost forgotten Missouri steamboat.

## Broadwater County.

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### Broad Agricultural Valleys and Prosperous Mining Camps, Producing Gold, Silver and Lead.

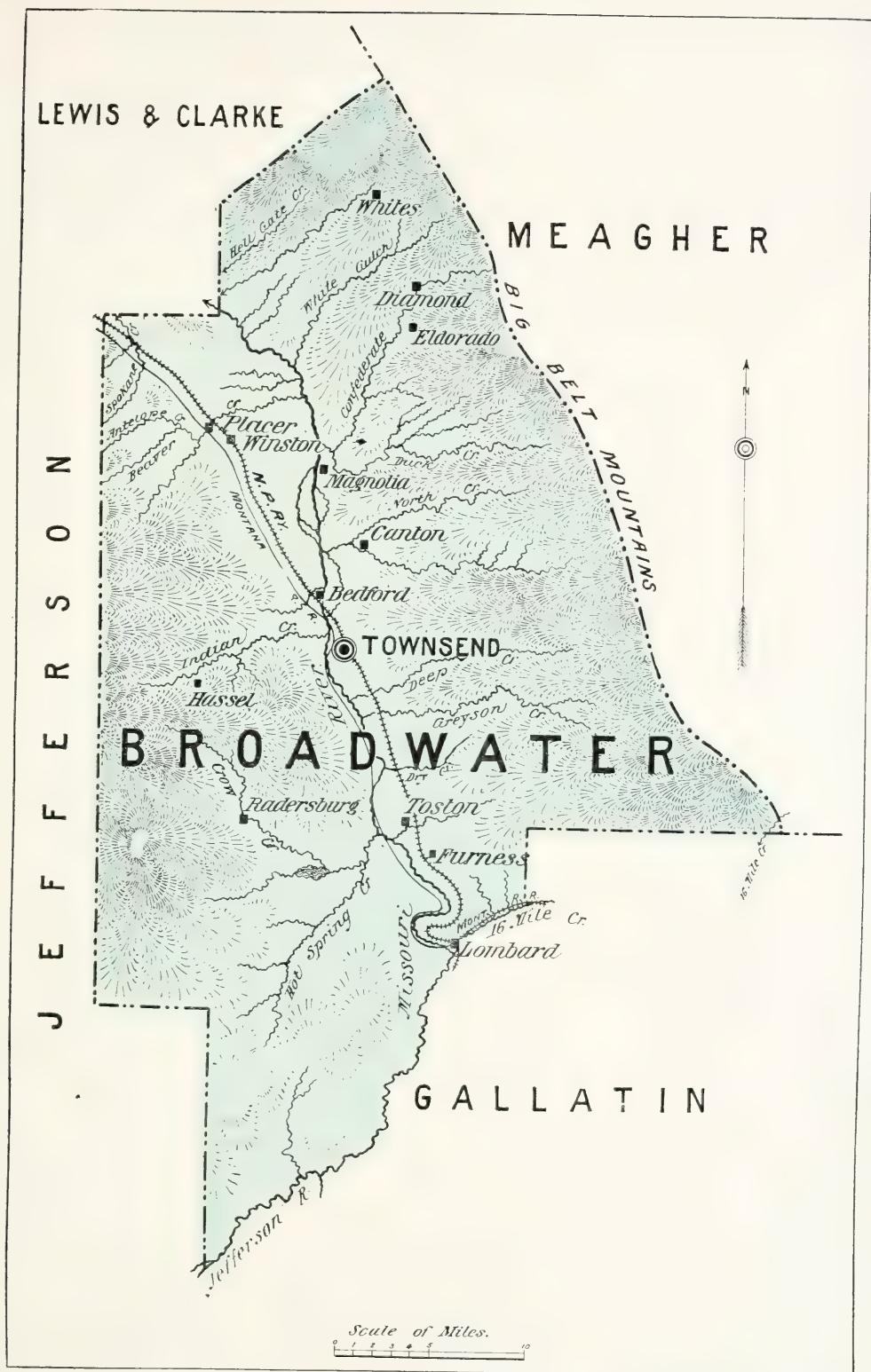
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Broadwater county, named in commemoration of the memory of Colonel Broadwater, whose name will have a prominent place in the pages of the history of Montana's progress. The area of the county is about 975 square miles, with a realty assessment for 1900 of \$981,646, personal property \$745,277, railways \$247,010, or a total of \$1,973,933. The population of the county is 2,641. Farming and stock-raising are very profitable in the valleys, and the mining camps at Radersburg, Winston, Hassel and St. Louis furnish employment to many men, and are among the wealth-producing camps of the state. The principal agricultural valleys are the Missouri, with its tributaries. Crow Creek valley on the south is a fine farming country. The soil in the valleys is generally a sandy loam from seven inches to several feet in depth, and produces abundantly all the grasses, grains, vegetables and root crops. The agricultural production in the valleys is limited, but with better railroad facilities and the present revival of the mining industry, will be greatly increased. Small fruits are raised in all the farming districts, and the standard apples, plums and cherries are grown in the Missouri valley. Large quantities of hay are raised and furnishes the winter supply for feeding the stock that grazes on the pasture lands of the county. Good water is found at from twenty to forty feet in depth. Timber for fuel and fencing grows on the mountain sides. The county has two railways, the Northern Pacific and the Montana, which afford it ample transportation facilities. After running through but two miles of Broadwater county, the Montana railway traverses the northern part of Jefferson, and again touches Broadwater at its southeast corner, providing transportation facilities for a considerable portion of the latter county. There are several water ditches already built and covering much of the farming land in the valleys, but there are still large areas that can be brought under cultivation by diverting conveniently abundant water to them.

Townsend, the county seat, is beautifully located on the Missouri river on the line of the Northern Pacific railroad, and has a population of 900, and is supplied with an electric lighting system. The town is surrounded by a fertile valley, and is a progressive and growing place. There are public schools, churches, public buildings and everything pertaining to the comfort and happiness and prosperity of the people.

Improved lands can be had for from \$20 to \$75 per acre, according to the nature and quality of the improvements and the state of cultivation.





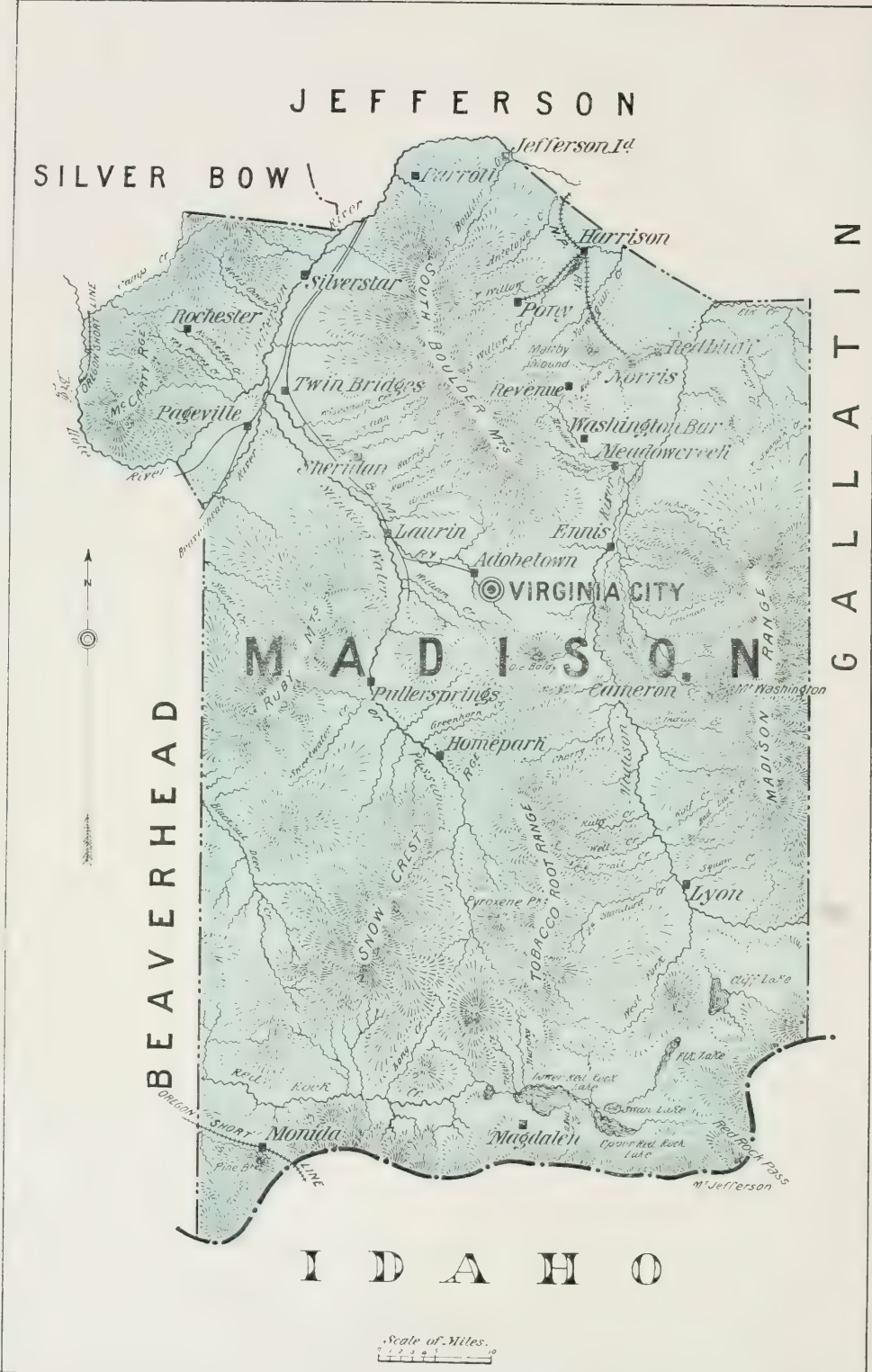
#### Assessed Valuations.

Real, \$981,646; personal, \$745,277; railroads, \$247,010; total, \$1,973,933.









Assessed Valuations.

Real, \$1,827,435; personal, \$1,996,807; railroads, \$245,164; total, \$4,069,406.

## Madison County.

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### The Resources of the County Are Mining, Agriculture and Stock Raising.

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The area of Madison county is 4,250 square miles, and the realty assessment is \$1,827, 435, the personal \$1,996,807, railways \$245,164, making a total of \$4,069,406. The population of the county is 7,695. Branches of the Northern Pacific railroad reach Norris and Pony, and during 1899 a branch has been built from Whitehall to Twin Bridges, tapping a rich agricultural and mining territory.

The county is about two-thirds mountainous, the remainder large, fertile valleys, bench land and foothills. The valleys are the Ruby, Madison, Willow Creek and Jefferson. The elevation ranges from 4,000 to 6,000 feet; the soil of the bottom lands is generally of a deep black loam, and on the bench lands a sandy loam with clay sub-soil. The soil varies in depth from a few inches to five or six feet. Except in rare instances, the lands require irrigation for successful cultivation, but with irrigation all the grasses, grains, vegetables and root crops grow well. There is a great deal of very fertile land in the county, and small fruits are grown, together with some varieties of the more hardy apples. There are also large areas of pasture lands, and stock-growing is one of the principal industries of the county. Many large herds of cattle and flocks of sheep are pastured, and stock-growing in connection with farming is very successfully carried on. Fairly improved farms with water rights can be purchased at from \$8 to \$35 per acre in nearly all of the valleys. The absence of railroad facilities has prevented the advance in the price of farm lands in proportion to lands of equal fertility and productiveness in other parts of the state, where the opportunities for reaching markets are better. Most of the lands where water can be economically diverted have been taken up, but there are lands on the Madison and Jefferson branches which can be reclaimed by building large irrigating ditches.

Madison county has as great a variety of, and as extensive mineral resources as any county in the state, but the lack of transportation facilities has greatly retarded their development. The railroad extended to Twin Bridges during 1899, however, has largely stimulated the mining industry in the adjacent regions. In the southern part of the county asbestos is found with a length of staple of one to three inches. On Sweetwater creek, on the upper Ruby, cassiterite ore has been found, and at one time caused some excitement, but the per cent of tin contained in the ore would not justify treatment. More economical processes of treatment will some day allow the development of this industry. Placer mining by dredging is carried on at the mouth of Alder

gulch and in a smaller way in other places. A year ago a sixty-stamp mill was erected to treat the ores of the Kennet mine, at the head of Moore's creek, and the company is being reorganized and will work the mine soon on an extensive scale; at Pony a 35-stamp mill, at Richmond Flat 20 stamps, at Red Bluff 10 stamps, and at the Leiter mine 20 stamps are crushing ore; 30 stamps at Rochester, which has become a large camp during the year. The mountains near Sheridan are filled with prospectors, and a large quantity of ore is being shipped to the smelters of Butte and Helena for treatment. In the Mayflower district a number of very rich mines are being worked, and many prospects only await development to prove their value. There is great activity all through the mining districts of Madison county, and each year adds to the number of paying mines. Graphite, mica, building and limestone, fire-clay, lead, zinc, potter's clay and coal are found in paying quantities, as are sapphires, rubies, garnets and moss agates.

Virginia City, the county seat, was formerly the capital of the territory of Montana. It is not reached by any railroad, the nearest point being Twin Bridges on the Northern Pacific, and Morris on the east side, from which points communication is afforded by daily stage lines. Virginia City has a population of 568, and is located in Alder gulch, which was discovered in 1863, and is estimated to have yielded to the present time \$150,000,000 to \$200,000,000 in placer gold. The gulch is seventeen miles long, and was probably the richest gulch ever discovered. Other principal towns in the county are Sheridan, Twin Bridges, Pony and Morris. The State Home for Orphans is located at Twin Bridges. There are large mining interests at Pony and near Sheridan.

Madison county has four banking institutions, and is well supplied with newspapers, the oldest of which is *The Madisonian*, published at Virginia City, established in 1873. The other newspapers are the *Alder Gulch Times*, *Sheridan Chinook*, *Monitor* at Twin Bridges, and the *Pony Sentinel*.

With its large area of agricultural land and its vast mineral resources, Madison county is one of the most promising counties in the state.



## Agriculture in Montana.

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While Much of the Fertile Lands Require Irrigation, Thousands of Square Miles Can Be Tilled With More Than Customary Profit—A Letter on the Subject from Hon. Paris Gibson.

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From the fact that the country lying along and east of the Rocky Mountain range, has for generations been credited with being arid, it has become the popular notion that little in the way of agriculture can be made successful in this state without the aid of artificial watering. The fact, is, however, that there are thousands of unirrigated farms in Montana today that are more successful financially than are the farms of more eastern districts that are not rated as being within the arid belt, and there are yet thousands of square miles within the state that are open to location, that can be converted into most profitable farms without the aid of irrigation.

An article published some time ago in one of the papers of the east, asserting the general aridity of the state, brought out the following reply from Hon. Paris Gibson, of Great Falls, who is one of the early founders of successful farming on the unirrigated bench lands. Mr. Gibson was one of the early settlers of the Great Falls district, and is the father of that prominent and thriving city, as well as "a grand old man," and what he says in the following may be taken as absolute fact:

"No man," Mr. Gibson writes, "can be a sincere advocate of the greatest and speediest growth of agriculture in Montana who does not earnestly advocate the creation of a great irrigation system here. No one believes in successful farming upon the largest portion of the lands of the state without irrigation; but there are thousands of square miles of lands in Montana where industrious men can farm successfully without the aid of irrigating ditches.

"It is unfortunate for our agricultural development that there are men in parts of this state who view with alarm the occupation of our lands by farmers, and who make great efforts to discourage pilgrim farmers as soon as they arrive here. They assure these newcomers, first, that there are no lands in Montana upon which they can make a living from farming unless they have irrigating ditches, and then they tell them that whether they can grow crops with or without irrigation they will have no markets for their farm products, and this assertion is made in the face of the fact that we are sending to other states millions of dollars annually for butter, cheese, poultry, eggs, bacon, etc. If you will come across the mountains next summer and go with me over the country between Great Falls and the Belt mountains, I will give you one of my best Holstein cows if you do not admit that the

farmers there are as contented and prosperous as you will find them elsewhere in the state, and I believe without an exception that they are all farming without irrigation. While you are here I will show you from 1,000 to 1,200 square miles of land in Cascade county upon which industrious men, not horseback farmers, can establish homes and become prosperous without the aid of irrigating ditches. Large areas of land similar to these lands in Cascade county are found in Fergus, Choteau and Teton counties, on which excellent crops of grain can be grown, and are being grown without irrigation.

"These lands, of course, would be much more valuable if they could have the benefit of irrigating ditches, but many of them are so situated that they apparently can never be irrigated. Some years the yield of grain from these lands will be small, and occasionally, as in 1890, there will be a complete failure, but the average yield for ten years will be excellent. My crop of hard spring wheat averaged  $19\frac{1}{2}$  bushels to the acre in 1897, and 22 bushels in 1898, and, while I have not the figures showing the average yields for the ten years in which I have sown wheat here, they have certainly been very satisfactory during that period. My neighbors higher up on the plateaus have made a better showing than I have, one farmer's wheat crop having averaged about 29 bushels per acre yearly for six years past. Now let us compare this with North and South Dakota averages:

"These states together show averages as follows: Average in 1893, 9 bushels; in 1894, 7 3-10 bushels; in 1895, 15 bushels; in 1896, 11 5-10 bushels.

"It is well to bear in mind that while yields of grain are much larger with than without irrigation, in this state, it costs much more to cultivate an acre of irrigated than non-irrigated land.

"I will state before closing that I grew to manhood on a New England farm, where the land is rocky and sterile to a degree not understood by those who were born in the middle and western states. Not an acre of land of our homestead place could produce even white beans unless it had first been heavily fertilized, and it was necessary that this process of fertilization should be kept up yearly as long as the land was cropped. Under such circumstances the farmer could cultivate only a few acres. Now, these New England farmers by diligence and close management, built pleasant homes, made a good living, educated their sons and daughters, and accumulated millions of money, much of which is loaned out today in cities of the great west and to farmers in the Mississippi valley. If farming could be made a success on the rocky hillsides of New England, what shall we say of the farmers' chances on these rich, non-irrigated highlands that skirt our mountains for hundreds of miles? These lands are only waiting the coming of industrious, intelligent farmers to take their places among the most productive agricultural sections of the country. Our people cannot all be cattle kings, sheep barons and bonanza miners; some of them must occupy more humble but not less honorable positions on the farm lands of our state."

Then to add to the lands described, that may be cultivated without irrigation, there are hundreds of valleys that lie within the confines of the mountain ranges that have the most abundant precipitation of moisture, and where crops are as certain as the regularity with which they are planted. These

locations may be found on both sides of the main range Rockies and among the other mountain branches and ranges.

The Flathead valley that is fully described under the article treating the county of that name, is one of the districts that do not require artificial watering, as the natural precipitation is abundant and certain. Much of Missoula, Ravalli, the valleys of Beaverhead and Madison, of Deer Lodge, Meagher, Cascade, Fergus, Gallatin, Sweet Grass, Yellowstone and Custer also afford opportunities to locate on agricultural lands that can be profitably tilled without the aid of irrigation. In the cultivation of these lands the farmer does not encounter the multitude and variety of risks that are assumed by those who have settled in the Red River valley, or any other wheat district of the several states lying in that belt. Then, too, in all of that country the farmer must endure the penalties and inconveniences of severe and long-continued winters, and his opportunities to combine stock-raising with that of agriculture is restricted by the necessity of having to warmly house and feed all livestock for a continuous period of five months. Contrasted with this unprofitable condition, the farmer of Montana, whether located on non-irrigated or irrigated lands, not only enjoys the pleasures and comforts of bright and warm winter seasons, but is allowed by these conditions to engage as extensively as may be in stock-raising at a large and assured profit, and with comparatively small expense and little effort. After a frost in any of the middle country, the standing grass is converted into dead and valueless straw that entirely lacks any nourishing properties; here the grass is "cured" as it stands, having all the nutrition of the best and strongest hay, and the stock and sheep pasture upon this during the entire winter. There the snows fall in early November, and the temperature drops to an uncomfortable number of degrees below zero, and stays there; here there will be a flurry of snow, and then the warm chinook winds come, and in a few hours the snow is dissipated, the water is running fresh and bright in every little rivulet, and the atmosphere is one of the delightful autumn, instead of the Arctic winter. So the agriculturist of the colder district will appreciate the difference between the climatic conditions that confine him to a short season of work and a long period of practical idleness, and to the protection of little more than the single crop of wheat, and the conditions that prevail here, which allow the agriculturist to widely diversify his soil products, and also offer every attractive inducement to engage in cattle or sheep-raising, and allowing a combination of business that profitably engages his attention during the entire period of every year.

Prof. Emery, for a number of years director of the government agricultural experimental station located at Bozeman, and perhaps better qualified to speak authoritatively on the subject than any other agriculturist, says of the lands that may be tilled without the aid of artificial watering: "I am of the opinion that if the tillable area of Montana, in round numbers about 50,000 square miles (or 32,000,000 acres), were plowed to a depth of 12 inches, the soil perfectly pulverized and this land summer fallowed each alternate season, that without a drop of water being artificially applied to the surface of the earth, and the same care taken in fitting the soil for the reception of seeds



that is practiced in older states, that one year with another, the thirty-two million acres thus tilled would yield better average crops for ten, twenty or a hundred years than would the same areas in Dakota and Minnesota.

"In round numbers, the rainfall of the state averages eighteen inches, or 50 per cent. more than is required for successful crop-production, if applied in the proper season.

"No doubt there would be years when the harvested crop would not return the seed sown, but on the other hand these years would be offset by crops yielding twice or threefold the average of eastern crops.

"Oats grow from 48 to 60 inches in height, and the stalk is as large as a pipe stem, and the upper 16 to 18 inches are occupied by the branching panicles, their sheaths all fully occupied by large and plump kernels. The measured bushel, instead of running under 32 pounds, goes from 42 to 48 pounds, and the yield runs in excess of 100 bushels to the acre, and as high as 129 bushels to the acre is on record. The field pea, which is the superior of Indian corn from all comparable points, grows and produces with the utmost luxuriance. An acre produces from 40 to 50 bushels of peas, and in the neighborhood of four tons of forage from the straw. All root crops are produced in the greatest abundance. Some years ago the American agricultural competition was entered into by a Bitter Root farmer with a sample of potatoes that came from a measured acre yielding 1,213 bushels, and it is needless to say that he took the prize for this product. Mangels, carrots and turnips all yield abundantly. Hard wheat is a more certain crop here than in many of the popularly classed wheat districts, and the yield runs from 20 to 60 bushels per acre, with the former the exceptional yield. With irrigation, celery grown in Montana is more abundant in production, and of a finer and clearer and crisper quality than that produced in the noted celery district of Michigan. No part of the country can equal Montana in the production of any of the varieties of clover. There is no product of the soil, except such as may demand either a very cold or a very hot, tropical climate, that cannot be made exceptionally profitable in Montana.

And Montana presents another advantage to the agriculturist that is not secondary in importance, and that is an unfailing, high-priced home market for every product of the farm and yard. The middle-state farmer is producing largely in excess of the demands of the home market, and as a consequence the surplus has to be shipped considerable distances to the larger centers of population where the demand exceeds the production of the immediate country, and in doing this the larger portion of the scanty margin between what it has cost the farmer to raise his crop, and the price he is paid for it, goes to the transportation company. In Montana the transportation question cuts little figure in the soil products of the ranch, and there is at all times an abundant home cash market, with prices that are much in excess of the eastern figure. This condition will always exist, as the mineral resources of the state will for all time afford employment to thousands upon thousands of men who will produce vast wealth, and in doing so earn the highest of wages, but who do not and will not produce any of the things they consume. The per capita consumption of Montana is greater than that of

any other state, and in the past, and as it will be in the future until our farm lands are settled and made to produce, very much the larger part of the products of the soil that are consumed will have to be imported. But with the settlement of the arable lands of the state, this will be changed, and hundreds of thousands of dollars that are now sent outside of the state for the products of the farm will remain here, where they are made and earned, and will be paid to home farmers for the productions of Montana soil. But a very considerable portion of the population of Montana is now engaged in agricultural pursuits, and the proportion will not be abated, as with the continued rapid development of the wonderful resources of the state, thousands and hundreds of thousands of hands will be employed in the mines, the smelters and their collateral industries; but there are thousands of opportunities for agricultural locations that not only offer a home for those who are now without homes, but that offer an opportunity for the homesteader to prosper and grow rich—to experience a measure of prosperity that has never in any other land been the good fortune of the farmer. Aside from the home market that will provide the best market for the product of thousands of Montana farms, it is in close communication with the western market, and at the very door of the Asiatic market, that is now opening up such extensive possibilities for the products of the American farm and range.

The climate of the state is the most enjoyable and healthful to be found on the continent, and while it lies in a comparatively northern latitude, is favored with the temperature of the more northerly southern states. Its summers are delightfully bright and warm by day, and the evenings and nights are refreshingly cool and restful, while in the winter season the soft chinook winds dissipate the cold and intersperse the crisper days with the inspiring cheer and warmth of full spring time. It is very rare that a period of cold continues longer than from two to four days, or that the snow is allowed to accumulate to any considerable depth, so that cattle, horses and sheep are allowed to range uncared for during the winter months, pasturing upon the rich grasses of the hills and valleys, caring for themselves without cost or worry to the owner. The farmer of Montana is given the opportunity, without the use of any portion of his own landed possessions, to engage in the raising of cattle and horses, and the growing of wool, branches of the agricultural industry that have brought wealth to many of Montana's present residents, and that have not one record of partial failure to be made against them.

The farmer looking for a new location may consider all the advantages offered by every other locality, and when he compares them with those of Montana, he will decide that this is the state in which to establish a profitable and congenial agricultural home.

## The Irrigated Lands.

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Some of the Semi-Arid Districts of the State That Have Been Artificially Watered—A Co-operative Canal System That Has Been Successful, and Is Making Money for Its Owners.

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While the state has many districts that do not require artificial watering, and which are mentioned elsewhere, and has large areas that will have to be watered through the medium of a national irrigation system, as the waters for the purpose must be conserved by large mountain reservoirs and led through the foothill districts by large main canals, all requiring an investment of capital that is greater than can be interested through individual effort, there are also districts where the water has been easily accessible, and the topography of the surrounding country has been such as to warrant irrigation by individuals, corporations and in two instances by co-operative companies, both of which have been wholly successful in watering large areas of land, and in securing profits for those who are interested in them.

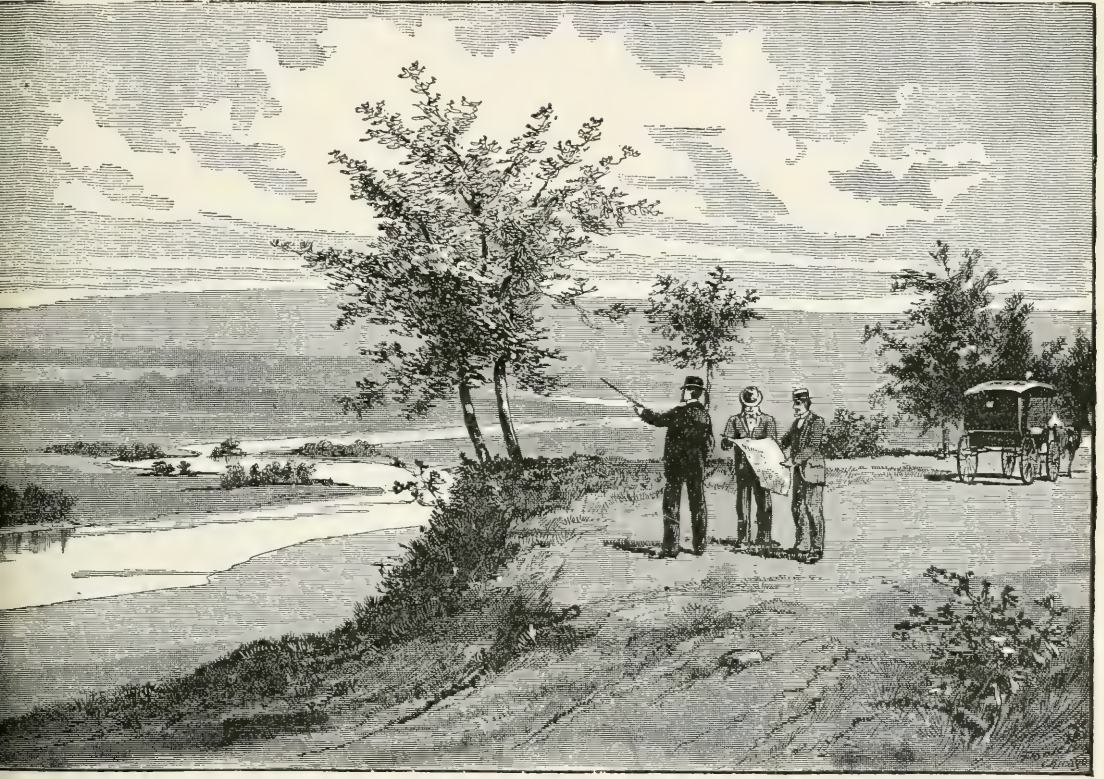
In the northeastern part of Montana, stretching from the North Dakota line on the east to old Fort Assinniboine on the west, a distance of 285 miles, and bounded on the north by the international line, and on the south by the mighty Missouri, lies the Milk River valley.

This immense territory was first opened to settlement May 30, 1888, and, misled by an unusual rainfall during that and the following year, the general impression gained was that paying agricultural crops could be produced there without irrigation, and an immense immigration movement immediately set into the valley, but the next two or three years proving dry ones, and no crops being produced, many left the country in disgust. The more determined, however, began looking around for some means to overcome the difficulty in what was otherwise a very desirable section of the state. The center of the irrigation movement at the time was the new town of Chinook. Mr. T. C. Burnes carefully looked the situation over in 1898, and concluded to locate, and to construct an irrigation canal to water his land. He began operations immediately, and had made fair progress when the next year he concluded to make the canal co-operative, and to associate as many in that locality with him as chose to. After much discussion a company was formed, with Messrs. T. C. Burnes, A. H. Reser, Thomas O'Hanlon, James Maney and W. M. Wooldridge, all of Chinook, as the incorporators. The canal was proposed to reclaim 14,400 acres of land, each farmer was to work out his proportion within a specified time, and if not done his stock was to be sold, and he thereby forfeited all rights in the canal. Doubts about the ultimate success of



the project were freely expressed, but the entire community, including the business men, realized that this was their only salvation, and the work was pushed. During the entire season of 1900 this canal was bank full, and resulted in many thousand dollars worth of farm products being produced.

Since the completion of this first canal, which is known as the "Belknap canal," eight others have been organized, and these cover something like 60,000 acres of choice bottom land. These canals represent an investment of fully \$200,000, all owned and controlled absolutely by the farmers themselves. The cost of reclamation by the means of these co-operative canals has been \$3 per acre, with the maintenance at 15 cents per acre per year.



IN THE MILK RIVER VALLEY.

All of the government land that can be cheaply irrigated in the vicinity of Chinook has now been located, but much land yet remains unoccupied in the eastern part of the valley. The Great Northern railway has during the past year started another colony at the little town of Hinsdale, and have induced Mr. W. M. Wooldridge to go there and identify himself with that section. The same steps are being taken at Hinsdale that proved so successful in the settlement and reclamation at Chinook, where Mr. Wooldridge was station agent when that section was settling up. The same system of co-operative irrigation canals is being followed, a canal covering 10,000 acres of choice bottom lands has been laid out, and work begun on it during the past year. Several thousand acres of these choice bottom lands yet remain unoccupied in the vicinity of Hinsdale, and also many choice stock locations.

A great deal of choice bottom land can yet be entered under homestead and desert acts in the vicinity of Ashfield, in Valley county, also near Culbertson and Glasgow.

In choosing a location the new settler should be sure that there is some possibility to irrigate the land located. This is especially so in the Milk River valley, where the tracts of unoccupied land are so large as to prevent individual ditches.

All of the staple agricultural crops do well in this valley. The general altitude is only a little above 2,200 feet. This makes it possible to produce tomatoes, beans, melons and many tender plants not possible to produce in many valleys having a greater altitude. The yield of the principal agricultural products is as follows: Wheat, 25 to 40 bushels; barley, 35 to 60; oats, 50 to 100; potatoes, 300 to 600; alfalfa hay, five tons; timothy, two tons; blue joint, one and a half tons.

This is one of the greatest stock countries in America. Thousands of beef cattle are annually shipped or driven into this section from Arizona, Oregon, Washington, New Mexico, Colorado and Wyoming to graze one year, and are then placed upon the Chicago market. Of late years considerable attention is being paid to fattening beef and mutton by winter feeding and with very gratifying results.

Alfalfa has proven a very profitable crop, doing splendidly, and yielding an average of five tons of cured hay per acre, some farmers during the present season having netted as much as \$30 per acre from this plant. Several thousand acres will be seeded to alfalfa during the coming year.

Cattle, mutton and wool shipments during the past season were something like 4,000 cars of beef cattle, 1,000 cars of mutton and 5,000,000 pounds of wool. These industries are merely in their infancy, and will show a very substantial increase during the next ten years.

Fruit growing, as far as tried, has proven successful, much small fruit being produced, and apples, pears, cherries and plums have been largely planted during the past four or five years, and some of these are just coming into bearing, and results are very encouraging.

Good markets are obtained right at home. The products of the valley have not yet reached the point of home consumption, it being necessary each year to ship potatoes, oats, pork, butter and eggs into the valley towns to supply the local demand. Prices of farm products average very high.

Any industrious, economical person need not hesitate to locate in the valley. To those possessing teams, implements, and a few hundred dollars with which to build themselves a home, it offers exceptional inducements. Many who previous to locating in the valley were obliged to depend upon a rented eastern farm as the means of making a living for themselves and their families, have located and built up comfortable homes here, and are now able each year to put away or invest a comfortable surplus after deducting all cost of operating their farms.

The people of this valley are always willing to lend a helping hand to those who seek a home within her borders. Schools, churches and business houses have been established throughout the valley, transportation is easy of



access to or from any part of the world, and every convenience of the older agricultural community may be had.

The laws of Montana favor such enterprises, and safeguards have been put out to protect the small farmer. The by-laws and constitution of these companies provide for the enforcement of assessments, but the state laws and the articles of incorporation also provide that thirty days' notice of the assessment must be given before it becomes delinquent; and further, that another twenty days must elapse before the delinquent stock can be sold, and that an assessment of only 10 per cent. of the capital stock can be levied at one



DREDGING AN IRRIGATION DITCH.

time, which must be paid before another can be levied. This prevents too frequent assessments.

Writing of the success of this co-operative venture, Mr. Wooldridge says: "I wish to call attention to the fact that this work has been done during the time that our country has seen such financial distress; that it was done as a last resort, after those who did it lost every dollar they possessed trying to farm without irrigation. They were deeply indebted to the merchants of that section at the time of starting the enterprise. These merchants offered every encouragement within their power by generously carrying many of the farmers upon their books until they were able to repay them after having obtained water, and to the lasting credit of these same farmers, be it said that the merchants never lost a dollar in misplaced confidence. All this goes



to prove what can be accomplished by a community working in harmony and by united effort. Thousands of worthy families are to be found throughout the eastern states today who have not a roof to protect them from the elements, while the west has abundance of land that can be cheaply reclaimed and made profitable by comparatively little work alone, and where the water is going to waste and causing destruction. But it requires energy and determination to succeed.

Parties desiring to know more of this district, and of the co-operative irrigation project, that commends itself through its demonstrated success, may secure additional information by communicating with Mr. W. M. Woolbridge, at Hinsdale, Valley County, Montana.

Aside from these ditches there are thousands of individual water appropriations that have been made from the smaller streams, and the water taken is used to cover lands located in the immediate vicinity. Every valley in the state where the natural precipitation is not sufficient to insure the annual crops, is dotted with these individually irrigated farms, and their owners, combining agriculture with stock-raising, are among the most favored and prosperous of their class in the world.

Among the irrigation systems that have been established on a larger scale by combinations of capital in the form of corporations, is the canal system just completed in Teton county by the Conrad Investment company, which has its headquarters at Great Falls, Montana, the head of the company being Hon. W. G. Conrad. This system of canals has been under course of construction during the past two years, and is located near the southern boundary of the Blackfeet Indian reservation, four miles north of Dupuyer and about twenty miles north of Pondera, on the Great Falls and Canada railroad. The canal is a part of a well-planned irrigating system, which will water and reclaim thousands of acres of land, which under the existing circumstances, it is impossible to cultivate, but which will be converted into fine farming lands when properly irrigated.

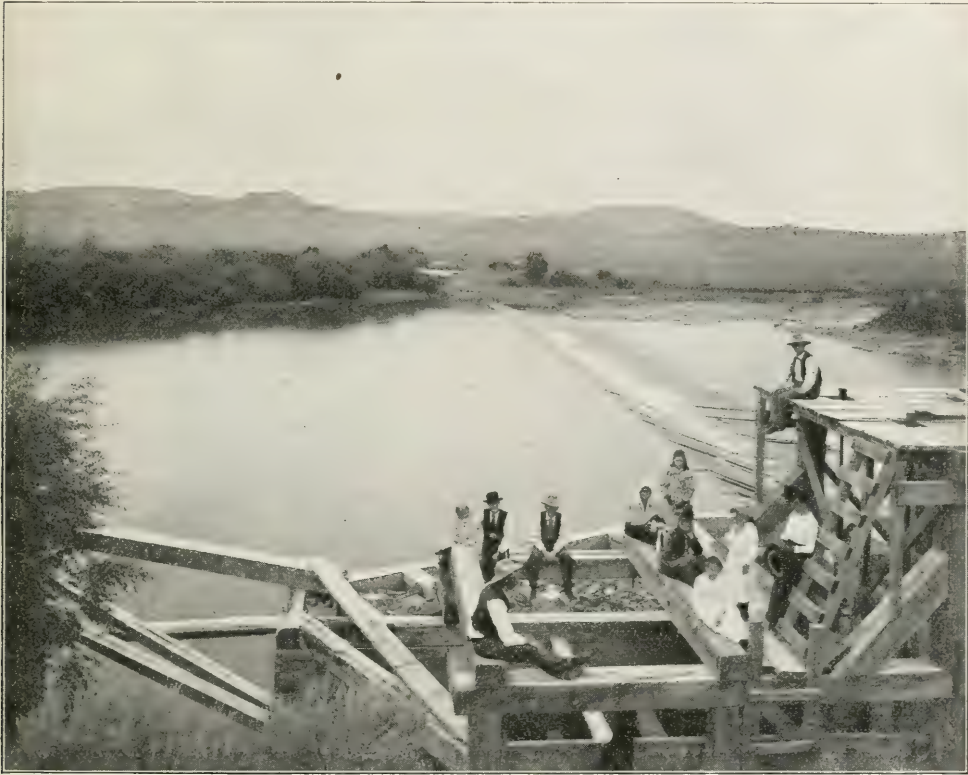
The main canal is twenty miles in length, and branching out from it will be over sixty miles of lateral ditches ranging in length from three to fifteen miles. It is three and one-half feet in depth, 22 feet in width at the bottom, and has a carrying capacity of 20,000 inches. The water supply for the canal is obtained from Birch creek, one of the feeders of the Marias river. Birch creek has its source in the main range of the Rocky mountains, and an ample water supply is obtainable at all periods of the year.

After leaving Birch creek the ditch runs due east a distance of fourteen miles, and then north a distance of six miles, where it empties into a reservoir which covers 3,300 acres at a depth of 15 feet. The water capacity of this reservoir is sufficient to cover a tract of land containing 45,000 acres to a depth of one foot. No ditches have been constructed yet from this reservoir, but the company proposes constructing a ditch from it to a distant tract containing 35,000 acres, known as the Pondera basin.

The present system will irrigate about 40,000 acres. This land lies on the high barren bench between Dupuyer creek and the Dry Fork of the Marias. The soil of this bench is a sandy loam, and is one of the best soils

that is known for the production of crops of any kind. It covers a sandstone formation, and lies at a depth varying from 3 to 10 feet. Upon this land the Conrad Investment company expects to establish a large stock ranch, and what land is not taken up by this ranch will be let out to individuals for farming and ranching purposes.

One of the largest corporation ditches in the state, but which has been converted into a co-operative institution, is that of the Minnesota-Montana Land and Improvement company, with headquarters at Billings. This company places over 40,000 acres under water, most of the land having been secured from the Northern Pacific railway company.



DAM AND HEADGATES.

Construction of this canal was commenced in 1882, and the main ditches were completed the following year. The principal or supply canal is forty miles in length, and takes its supply from the Yellowstone river at Young's Point. It is 25 feet wide on the bottom, and carries about 12,000 inches of water, irrigating about 20,000 acres of land. From the completion of "the big ditch," as is commonly called, dates the year of improvement and prosperity which has marked this favored section of Montana. The water was sold to the settlers at a cost of about 50 cents per acre for the season, which was low compared with the expense in Utah, Colorado and other states, where such canals have been constructed solely as a money making scheme. Since the completion of the canal many expensive improvements have been made,

expensive "fills" have taken the place of flumes, which were liable to be swept away by excessive rains filling the gulches over which they were built, and in a single year \$30,000 was expended in improvements. Now the farmer can confidently depend on having a full supply of water during the summer season, and sows his crops with an unwavering faith that it will not lack water to nourish it, even in the dryest season. This is a confidence the farmer in the non-irrigated sections cannot realize, and the dweller in the "arid west," who can regulate the supply of water to the needs of his growing crops, has long ceased to apologize for irrigation. Last spring the company sold its irrigating canal to a stock company composed of those farmers and ranchmen whose lands are benefited by the same. The company is capitalized in the sum of \$64,000, at \$10 per share. The water right is sold at \$2 to \$2.50 per acre, and thus each farmer or stockholder draws his proportion of the water. The cost of maintaining the canal is estimated to be about 5 per cent.

Since the corporation was made co-operative its membership has grown to 135. The stockholders meet at least twice a year, in the spring and fall, and once a year they elect a board of seven directors or trustees, who elect a president, vice president, treasurer and secretary from among their number and also employ a superintendent and ditch riders. The superintendent has entire charge of all work, and is paid a salary of \$100 a month for six months. The board of directors is limited to \$3,000 in making improvements without the consent of the stockholders. The by-laws state that one director shall be elected for at least every ten miles of ditch, but under the present arrangement there is one for every six miles.

The valuation of property covered by the ditch is given in the following summary:

Lands .....	\$ 750,000
Sheep being fed in winter from products of ditch.....	375,000
Cattle .....	450,000
Horses .....	50,000
Hogs, poultry and vegetables.....	20,000
Alfalfa in stack .....	150,000
Other hay .....	40,000
Small grains and seeds .....	40,000
Value of ditch .....	100,000
Total .....	<u>\$1,975,000</u>

Alfalfa is proving one of the most profitable crops of the irrigation district, the annual yield running from four to seven tons per acre. In 1898 C. M. Bair raised 1,420 tons of alfalfa hay on 200 acres about four miles from Billings. On the Hesper farms some alfalfa measured nine feet six inches in length. It was on this farm that 31,000 head of lambs were fed on alfalfa hay for the winter market last year, realizing a handsome profit. In all about 110,000 head of sheep were fed in this valley last winter. All the hay has been contracted for for some time. Probably one of the mainstays of the farmer in this valley will always be the raising of hay to feed from the stack, either to his own stock or to that of the neighboring range stockmen. This has proven highly profitable in the past, and will become more general as the range becomes circumscribed by settlement. All the grain crops abundantly



reward the labors of the husbandmen of this valley. Oats weigh from 40 to 52 pounds to the bushel, though the Montana standard of measurement is 32 pounds. The yield ranges from 40 to 150 bushels to the acre. The Hesper farm won the John A. Salzer premium in 1897 by an actual record of 163 bushels to the acre, in a contest open to the United States and Canada.

Potatoes yield from 300 to 600 bushels to the acre. Charles King, of Park City, has an actual record of 1,213 bushels to the acre, and is the record breaker of the United States. All small fruits, such as currants, raspberries, blackberries, dewberries, etc., produce abundantly, and the Yellowstone valley strawberry is the best of all that comes into the market. Apples, cherries and



AN IRRIGATION DITCH.

plums yield abundantly, and the fruit is of the finest quality and flavor. The displays of Bailey & O'Donnell, Olney Taylor and other fruit-growers of the Yellowstone county fair, are greatly admired by eastern visitors. Three of the 18 premiums for fruit displays at the Omaha Trans-Mississippi exposition in 1898 were awarded to Yellowstone county exhibitors.

There are other large ditches in Teton, Choteau, Gallatin, Cascade, Yellowstone and other counties, but more extended mention of these may be found in the articles descriptive of those counties.

In the experiments that have been secured with special crops on Montana irrigated lands, it is found that the sugar beet is one of the most certain, and carries an unusually large percentage of sugar, and as a consequence ultimately proves to be one of the chief products of the semi-arid districts of the state.

The arid region, being free from droughts or unusual rainfall, alike injurious to beets, only requires proper culture and wise use of irrigation to

insure crops that shall be alike profitable to the grower and to the factory. The experience of some of the most successful factories in the west justifies this. It is evident, therefore, that this industry is peculiarly adapted to the arid west. It is almost the only new industry that unites agriculture and manufacture so as to keep within the state or section the money now sent away to pay for sugar brought in from foreign countries or from other parts of this country. In many ways the hour is ripe for a vast development of the beet sugar industry in the United States.

Already thirty-three beet sugar factories are in successful operation in the United States. They are cutting up a hundred thousand tons of beets daily, and are paying the farmers half a million dollars a day for this new crop. Wherever the farmers are practicing the culture of sugar beets with industry and intelligence, it is proving a remarkable crop. Indeed, the beet sugar industry promises to be the greatest addition of the twentieth century to American agriculture.

In order to secure profitable results with the sugar beet, intensive culture is absolutely necessary. The careful preparation of the land, the proper fertilization thereof, and the careful culture of the growing plant are three essential points to success.

The water supply is the most important meteorological condition connected with beet growth, aside from the other natural conditions which attend the summer weather of temperate climates. If the growing beet can be supplied with the proper quantity of water at the proper time, its progress towards maturity is never arrested, and there is no tendency for the plant to ripen prematurely and afterwards undergo a second growth.

Arid lands contain quantities of soluble salts. The sugar beet is pre-eminently a mineral-assimilating plant, and a growth of beets upon lands impregnated with soluble salts will tend to remove them from the soil, and thus improve the quality of the land thereby. The sugar beet, therefore, is confidently recommended to all owners of irrigated lands as a crop which promises the most favorable returns.

Of crops that are profitable and certain on the semi-arid lands, and which will be useful in putting to use the little areas that on account of their relative altitude cannot be artificially watered, are Kafir corn, broom-corn and millet.

#### **The State Arid Land Commission.**

Mr. D. A. Cory, secretary of the State Arid Land Commission, in his annual report says that a tract of land in Lewis and Clarke county has been segregated, and that there are prospects of having it placed under water in the near future; that responsible eastern parties have District No. 1, near Billings, under consideration, and the commission hopes for favorable results. There is a total of 10,632 acres in this district, and its close proximity to Billings should make it an attractive proposition to investors, as the land would be taken as fast as the contractors could get it ready for the settler. The Northern Pacific land department own 15,000 acres which should be made a part of this district, and have offered exceedingly favorable terms to prospective purchasers. The engineering work, through the financial aid of the public spirited citizens of Billings, has been completed.

Work in district No. 2 should have begun on June 1, 1900, but, for reasons satisfactory to the commission, the time has been extended to April 1, 1901, with the understanding that no further time would be asked or granted.

In district No. 3 twenty thousand acres of magnificent bench land have been selected, and, situated as it is, between the thriving towns of Bridger and Red Lodge, there would be no delay in its prompt settlement, upon the completion of the canal. The commission feel safe in saying that this canal will be built during the year 1901.

Bids for the building of the canal system in District No. 4 were duly advertised, and the commission hopes to let the contract in the near future. The water for this system will be taken from the Dearborn river, and the valleys of Flat creek, Dry creek, Simms creek and Spring coulee reclaimed, in all, about 33,000 acres. The contract will provide for the prompt settlement of the land as fast as it is reclaimed.

In the last report we published an article from the pen of Prof. Emery, of the Bozeman Agricultural College, on the cultivation and productive ability of a 160-acre irrigated farm, and as the item attracted general attention in eastern agricultural communities, and as it also demonstrated what the acreage of this western country can do in the line of supporting population and of creating wealth when its millions of thirsty acres are given water, the item is reproduced:

The ownership of lands carries with it a duty to our fellows and to posterity which cannot be gainsaid. It is ours to handle to the best advantage, and we cannot discharge this duty upon any lines save those of the greatest production commensurate with the conservation of soil fertility. How this may be done is one of the most important agricultural problems. Beyond doubt the annual cropping of the soil is along this line, for notwithstanding the apparent gain in crop yields under summerfallow, as against annual grain cropping, it is a fact scientifically determined that this stimulus is an unnatural one, and that in time great loss of valuable mineral properties from the exposure of the bare soil to the summer winds and fall storms is bound to work serious impairment of value to land.

Crop rotation is left as the only intelligent method of farming, as it is out of the question to annually apply farm manures to so extended farm areas, as rapidly as the resultant good effects therefrom are consumed. Do not understand that manuring of lands is decried; not at all; all of this sort of work should be done that is possible, but where one undertakes to apply barnyard manure at the rate of twenty loads per acre, it becomes a sizable task when between 3,000 and 4,000 loads are required to a quarter section of land.

Nor have many Montana farmers the living machines for manufacturing farmyard manure in such amounts, i. e., the cattle or farm animals and the grain, hay and roots to be transformed into available plant food. So that it becomes a matter of necessity to formulate such a system as will be a combination of stock-growing and hay, grain and root tillage, with the distinctive plan in mind of feeding out upon the farm a large per cent. of grain, and all of the hay and roots. The 160-acre farm should be sub-divided into 40-acre tracts, each of which should be fenced with such a fence as will permit the



ranging of swine and sheep as well as cattle inside each field. Fencing machines, strongly built, cheap and easy of manipulation, are manufactured, and smooth wire of suitable sizes is sold at so low a price per pound that these stock-proof fences can be constructed at half the former expense of the cumbersome old rail and wire leaning fences which used formerly to mar the Montana landscape in every direction in the settled portions of the state. Again, the red cedar is indigenous to much of Montana, and a good taut closely woven smooth wire fence built on peeled red cedar posts is a neat, durable and substantial barrier to your own or your neighbors' stock. The question may be pertinently asked, why fence the entire farm for stock? Why not have pastures securely fenced, using a four-strand barb wire fence on



THE PRODUCT OF IRRIGATED FARMS.

balance of farm? Simply that the whole farm is designed to be pastured in its turn during the twelve months.

Montana is extremely dry, as a rule, during and immediately preceding grain harvest, and the loss in shelled grain from this cause is too great to be afforded unless the fields are fenced so that swine may be turned in between harvest and fall plowing to glean the fallen grain, and this they will do to perfection if given the opportunity. The fields divided into 40-acre tracts (it will pay you to sub-divide again into 20-acre tracts), there should be plans made to produce hay (preferably of alfalfa, clover or alsike), wheat, oats, barley, peas and roots, on about the following areas; say

40 acres devoted to hay.  
 20 acres devoted to wheat.  
 20 acres devoted to oats.  
 40 acres devoted to barley.  
 20 acres devoted to peas.  
 5 acres devoted to potatoes.  
 2 acres devoted to sugar beets.  
 3 acres devoted to mangel wurzels.  
 5 acres devoted to swine, clover pastures.  
 5 acres devoted to roads, buildings, corrals, etc.

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We will suppose that the land was of average quality, and had been summerfallowed the preceding year. The first season there might be 80 acres seeded to barley, of which 40 acres could be sown to clover, alfalfa or alsike, or an equal number of acres to each; they are all valuable forage plants and good yielders.

The following amounts of seed per acre are ample: Of clover and alsike, seven pounds; of alfalfa, twenty pounds. Do not sow with grain, that is, do not mix seed in seeder with seed grain, but sow the clover seed subsequently, using any one of the reliable hand sowers, broadcasting the seed on the surface. If the grain is sown with a drill it is well not to harrow until the clover seed is sown, then across the drill marks with a Scotch harrow, a light single harrowing. Of course, it takes time to inaugurate a rotation system.

It will be found a valuable thing to do (if water is abundant) to seed the entire 80 acres of barley to clover, irrigating the barley twice before cutting, and once immediately after. Should this be done apply the first irrigation as soon as the grain covers the ground, the second just before the grain begins to head, and the third irrigation just as soon as the grain is cut and hauled off for stacking; say within two weeks after barley harvest. The result will be, under normal conditions, a growth of clover over 12 inches high; this will bloom just before frost, and will make a splendid fall pasture or a green manure crop of great value to be turned under. These crop yields ought to result as follows:

80 acres barley, 4,000 bushels, 200,000 pounds.  
 20 acres wheat, 800 bushels. (Spring Club.)  
 20 acres oats, 1,500 bushels.  
 20 acres peas, 60 bushels.  
 5 acres potatoes, 1,500 bushels.  
 2 acres sugar beets, 60,000 pounds.  
 3 acres mangels, 1,500 bushels.

The crops for sale are worth, at normal prices:

4,000 bushels of barley, at 50 cents.....	\$2,000.00
800 bushels of wheat, at 50 cents.....	400.00
1,500 bushels of potatoes, at 25 cents.....	375.00

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Gross returns of sale crops from 105 acres.....\$2,775.00

Upon the 5-acre swine pasturing sow spring rye early in April, seeding with this alfalfa at the rate of twenty pounds per acre, give a good irrigation about the 25th of May, and by June 15th there can be safely turned on to this pasture six grade Berkshire and Poland China sows and their first litter of



pigs. These sows should bring two litters of pigs per annum, or eighty head of swine, annually, estimating seven pigs to the sow at each litter (as a matter of fact they will average more than eight in number per litter.) Turning these sows with their first litters into the pasture by June 15th, they will then gain a complete subsistence from the rye and alfalfa; should there later be a shortage in feed, it can be supplemented with peas, cut just as they begin to harden, and fed in racks in the swine pasture (and it will surprise eastern pea-growers to see how long it will take fifty swine to consume the peas grown on a Montana acre of land, where pea vine growth often attains



A MONTANA RANCH SCENE.

a length of twelve feet.) They will consume probably two acres of peas by the time harvest is over, and can then be turned into the fields to glean; we have had a herd of fifty head of shoats average a growth of ten pounds each per week for six weeks in the fall on grain fields. The eighteen acres of peas will yield 540 bushels of peas, and seventy ton of good winter forage for cattle, sheep or horses. These 540 bushels of peas, with the 1,500 bushels of mangel wurzels and the sugar beets will fatten the first litters of forty head of swine in December, and the same number in the following July (the date when the second litter will be ready to turn off), and the swine at this age should average 175 pounds, and be worth at the current rates for pork, \$10 per head, or a revenue of \$800 from swine, these bringing the receipts of the 160-acre farm up to \$3,600, or an average of \$22.50 per acre.



The clovers, red, white, alsike and alfalfa and peas are legumes, and potent introducers into the soil of the most expensive chemical fertilizer known to the farmer, namely, nitrogen. Following these crops the following year may be produced better grain crops than can be harvested from the best summerfallowed land, and by following this plan year by year, alternating the wheat, oats and barley the lands which produced clover, peas and roots the preceding year, it will be entirely feasible to duplicate these ordinary yields and prices for an indefinite term of years. We submit that no man is entitled to sympathy who can show gross receipts per acre of \$22.50 per annum, when the usual average of the United States is less than \$6. No account has been made of the disposition of the 40 acres of clover hay, easily capable, after the first year, of the production of 100 tons of hay, worth \$5 per ton, nor of the 75 tons of pea forage, worth \$1.50 per ton, as compared with clover, or of the good clean, bright straw from the 80 acres of grain. If the grain is stacked and also the threshed straw, this is worth easily \$1 per ton, and at the rate of a ton per acre (a safe estimate), \$80 can be realized for a crop which is too often consumed by fire to the actual detriment of the land. But speaking within bounds, after providing for the forage wants of the six horses required to farm this land, and of the four cows, which self-respect should require to be on each farm for the supply of the milk and butter there consumed, the residue of forage ought to be adequate to the stall fattening of forty steers, which should pay a profit of at least the estimated value of the forage crop, \$600, for the added value from feeding such a ration during the three winter months.

Should it not be possible to procure steers to be fed, lambs would pay quite well, or aged wethers, or open range stock, say 100 head, can usually be contracted for winter feeding, at \$1 per month, or \$500 for such a herd.

The benefit deriving from their droppings will easily offset the value of the labor in feeding in any case. This profit, added to the other farm receipts, will bring the gross revenues up to \$4,200, certainly a favorable showing to be produced on 160 acres of land.

## The Irrigation Question.

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**The Fact That Artificial Watering of the Great Semi-Arid Districts Must Be Accomplished by the General Government Is Popularly Accepted—The Wealth It Would Bring to the Country as a Whole—Project Too Large for Private Capital.**

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The last report of this bureau discussed at some length the proposed reclamation of the semi-arid district under state auspices, acting through state legislation under the offer of title by the Cary Act of Congress, but since that date there has been a more than appreciable growth of sentiment in the east, as well as in the west, in favor of the undertaking by the general government, not only for such districts within this state, but for the arid regions of the states lying to the south. The east is beginning to appreciate that the cultivation of the semi-arid lands of the west by means of irrigation opens an almost boundless field of possibility. The character of the soil, the climate, and all the natural conditions are such as to insure immense productiveness under the most favorable conditions if only the natural water supply can be used. Contrary to a somewhat general belief, the amount of water now used is only a small fraction of the available supply, and enough water runs to waste every spring to irrigate every acre that requires artificial watering to make it produce to the maximum of its capacity, and that can be covered within a reasonable expenditure. After leaving the closer foothill district that borders the ranges in Montana, practically all the bench and prairie lands that stretch for hundreds of miles to the eastern boundary of the state, can be watered by the supply that can be conserved in the immediate mountain catchments, and, after the construction of the reservoirs and the canals leading the waters through the foothills, may be carried to this immense district at a nominal cost per acre. But the utilization of the abundant waters of the mountain ranges that now go to flood the lower Missouri and Mississippi, and the diversion of water from some streams of abundant volume to distant areas of land, are problems for which the resources of private capital are insufficient. The irrigation of the arid lands of the west by means of long ditches and large reservoirs is peculiarly a field for national aid. It is something that cannot be accomplished in any other way, and it is also something that will be immensely valuable to the entire country, so much so that the national government may use for that purpose money raised by taxation with as much propriety as for the improvement of the harbors along the sea coast. The national lands are an asset of the nation, and their improvement is an investment that is certain to bring magnificent returns to



A MOUNTAIN-SIDE CANAL.





every interest, industry and individual in it. The soil cannot be made to produce without adding of its wealth to that of the nation. The scheme of irrigation, like that of transportation, covers many states and benefits all parts of the country, and properly belongs to the general government to put it in effect.

This view was accepted by Congress when it made an appropriation in 1887 of \$100,000 to be used by the director of the geological survey, for the purpose of ascertaining the feasibility of establishing reservoirs of water with a view to the establishment of a system of irrigation, and to ascertain to what extent the arid regions of the United States could be benefited by such a system, and several reservoirs with large catchments were located along the eastern slope of the Rockies in Montana, and estimates have been made upon the cost and amount of arid land, and that which can be reclaimed for agricultural purposes, has been determined, as well as that for timber and grazing. The precipitation of the different arable sections of the state lying within the semi-arid region, has been accurately taken, and every form of data secured necessary to an intelligent undertaking of the project by the national government

The rapidly growing belief that this work should be undertaken by the general government, led to the organization of the National Irrigation Association, and through its efforts a great deal has been done in educating the commercial and other interests of the country to the importance of the project to the entire country, and in demonstrating that while the location of the work may necessarily be sectional, that the benefits that must accrue must be equally advantageous to the prosperity of the entire country. Many of the cities of the middle states and the east have fully appreciated the logic of the situation, and have added their organized influence to furthering the general demand for national irrigation of the arid west. The business men and their associations have taken the matter up, and as a sample of this work, the Merchants' and Manufacturers' Association of St. Paul, Minnesota, recently issued a letter that stated:

That they had "carefully considered the policy advocated by the National Irrigation Association for the reclamation and settlement of the arid region of the United States, and endorse it fully, as set forth in the constitution of the association, annexed hereto.

"That policy in brief is that the Federal government shall, wherever necessary, build the irrigation works required for the reclamation of the arid public lands, reimbursing itself from sales of the land reclaimed; and that a fair share of each river and harbor bill shall hereafter go for building storage reservoirs, as recommended in the Chittenden Report on Surveys for Reservoir Sites.

"We believe that the inauguration of this policy would be largely beneficial to St. Paul, and all its business and property interests, through the rapid settlement and development that it would bring about in the great arid region in Montana and other arid states commercially tributary to St. Paul. When we consider that nine-tenths of Montana is government land; that Montana is larger than Ohio, Indiana and Illinois combined; that at the last census

the population of these three states was 9,645,856, and that of Montana only 243,329; and that Montana, if her irrigation resources were fully developed, would sustain as large a population as the three states named, the magnitude and vast and far-reaching importance of the problem becomes at once apparent.

"An effective national organization is necessary to secure the carrying out of the policy advocated by the National Irrigation Association. The plan of the association to accomplish this is as follows:

"First—That all commercial organizations shall strongly endorse this policy, and actively co-operate with the National Irrigation Association to bring about its adoption by the Federal government.

"Second—That merchants and manufacturers shall correspond with all their business connections, and ask their active and personal co-operation and membership in the association.

"Third—That all would be benefited by the commercial development and rapid settlement of the west, and should join the National Irrigation Association, so as to give it the strength of a large personal membership and a fund for carrying on its work of enlisting a general and widespread public interest and support for the movement."

They heartily approve and commend the plans of the association as above set forth, and will co-operate to aid in carrying them out, and have joined the association, and believe it will be for the best interests of all the merchants, manufacturers, business men and property owners generally of St. Paul, to give their strong support to this movement in this way.

The letter, continuing, says that "the interest in the national irrigation movement awakened among leading merchants and manufacturers through such letters as those written by merchants of St. Paul to their business connections in the east, proves beyond a doubt that by such correspondence the broad national importance of the national irrigation movement and its far-reaching benefits to all classes and sections of the country can be deeply impressed upon the commercial interests of the east, and their co-operation secured to bring about the inauguration of the national irrigation policy.

Ex-Speaker Reed said: "Every wise man agrees that beyond the Mississippi lies the great wealth of the days to come. In the development of this wealth we are all interested, and we in the east are not the unwise men to believe that we are not concerned in the progress and future of the west," and this sentiment is now being echoed by every prominent public man and newspaper in the east, the middle states and in the west.

Civilization sprang from agriculture, and the agriculture of the ancients was not left dependent upon the erratic clouds of heaven, but was made dependent upon the certain service of the dam and ditch.

In a lecture recently delivered at Great Falls by Hon. George H. Maxwell, president of the National Irrigation Association, he related the possibilities of this great state, when, added to its unequalled resources in other lines, and to its districts that are agriculturally productive without artificial watering, the great tracts that are not certain of production without irrigation, and are now devoted to range, will be given abundant moisture, and called atten-



tion to the fact that Montana is as large as the state of New York and all of New England. If all the waters that goes to waste and flows away to the ocean from the rivers of Montana, that could be utilized for irrigation, were brought upon the land of Montana, and used to make that land fertile, it would produce an annual yield of agricultural and livestock products as great in total value as the output of Illinois, Indiana and Ohio.

The annual floods of the Missouri river come largely from Wyoming and Montana, and run their course of destruction to the Gulf, tearing away banks, filling the river with snags, destroying channels, undermining bridges, jeopardizing the safety of cities and towns, breaking levees, overflowing farms and plantations, and at times overwhelming whole communities with disaster.

The Chittenden report is one of the ablest ever made to the government. It is an exhaustive research into and discussion of the whole problem of reservoir construction in its relation to the future of the west and of the benefits that are to accrue from it in the east. In conclusion his report says:

"First—A comprehensive reservoir system in the arid regions of the United States is absolutely essential to the future welfare of the national domain.

"Second—It is not possible to secure the best development of such a system except through the agency of the general government."

It must be borne in mind that it is not proposed that the Federal government shall store this water for sale to those who use it for irrigation, or seek to make a profit directly from the investment.

The use of the water so stored should be absolutely free to the people forever, just as the canals, harbors and other public works are free for general use without toll or levy of any kind."

These reservoirs would be built merely as a natural and legitimate exercise of the same governmental policy under which the Federal government now builds levees on the Missouri and Mississippi, and has built large reservoirs to store these same flood waters, not only protecting the lower country from flood, but at the same time preserving the upper country from drouth. In the tenth annual report of the United States geological survey, Major Powell claims that every acre reclaimed from drouth in the northwest by the storage of the flood waters of the Missouri will reclaim an acre from overflow in the lower Mississippi valley.

It is rather the popular opinion that the diversion of our streams and the application of their waters to the irrigation of contiguous arid lands, would deprive the streams of their water, and be detrimental to the navigable rivers, but the contrary is the fact. In localities where irrigation has been long practiced, that water diverted for irrigation is not lost; that after what is called the period of infiltration is passed the whole country between the canal and the river becomes filled with water like a great sponge and a large part of the water taken out of the canal returns gradually to the river or stream. This is what is called the return seepage. If all the flood waters of the Missouri and its tributaries in Montana were reservoired and taken out into canals for irrigation a great part of it would return gradually to the river during the dry season, and the flow of water in the river would be regu-

lated, and instead of being lessened in the dry season, it would be increased.

The fact that the establishment of mountain reservoirs and the irrigation of our semi-arid lands will prevent the flooding of the lower rivers and in doing so save from annual destruction a great deal of both commercial and agricultural property along the lower Missouri and Mississippi has directly touched the individual interests of the south and brought its immediate and active support to the cause, and the general position of that part of our people is expressed in the following resolutions recently passed by the St. Louis Manufacturers' Association:

"Whereas, The question of storage reservoirs to be constructed by the Federal government for the purpose of holding water in the mountains has been thoroughly discussed and passed upon by eight annual sessions of the National Irrigation Congress as the proper method to supply the arid west with irrigation water; and

"Whereas, The question of irrigation has been thoroughly discussed and passed upon as the only means of reclaiming and putting into cultivation the arid lands of the west; and

"Whereas, The storing of water in mountain reservoirs would greatly lessen if not prevent the overflows of the lands on the lower Missouri and lower Mississippi rivers, as well as tributary streams; and

"Whereas, The entire interests of the entire arid west demand irrigation, and the overflowed lands of the south and middle states demand protection; therefore, be it

"Resolved, That the St. Louis Manufacturers' Association in behalf of its patrons of the arid west and the overflowed district, asks that those two interests combine their power, and pledges to support the combined powers of those interests in securing from the Federal government the necessary appropriations for storage reservoirs for the purposes named; and be it further

"Resolved, That the St. Louis Manufacturers' Association feels confident that the Federal government has the same right and with equal justice can appropriate money for the improvement of rivers and harbors, of lakes and other internal development; and, be it further

"Resolved, That the St. Louis Manufacturers' Association will do all in its power to bring together these two interests to further the joint and common interests of all concerned—the west, the south and the southwestern states."

The enterprise is on a scale worthy the attention of the general government because of the benefits that must come from the development and growth of the west, to the whole country, and the broad-minded, far-seeing merchants and manufacturers of the east, when the subject is brought to their attention, see clearly that increased population and prosperity for the west would mean increased prosperity for the east. It would increase the markets for the eastern merchants and manufacturers in the west, increase the demand for labor in the eastern factories, and increase their home market for the eastern farmers. When these eastern merchants and manufacturers are selling millions of dollars' worth of goods in the west every year, they are willing to help the western merchants who buy those goods to develop their trade.

But they will not do it unless they are asked, and we cannot get the effective aid of these eastern interests unless we have a most perfect organization in the west. It is recognized that the support of the east is necessary to a final accomplishment of the project, and this space is devoted to it with the purpose of aiding in placing the matter before that portion of our people to the extent of the circulation in the east of this volume.

From the foregoing it is evident that irrigation of the arid portions of the west has secured the support of the eastern and middle state, southern and southwestern press, and the commercial and industrial associations of those sections. They have placed themselves on record, and in doing so have laid the foundation for the ultimate success of the great project. But to secure action and comparatively immediate results, the proposition must continue to receive the active support of every section. If the support is allowed to become passive, there will be no power to urge action and promote popular education, that will bring the irresistible support of organized public opinion.

It is this work of organization and education that the National Irrigation Association has undertaken, and it should receive the material and moral support of every citizen of every section.

The association was an outgrowth of the National Irrigation Congress, which held its last annual session at Missoula, Mont., last September.

The chairman of the executive committee of the National Irrigation Congress for that year was Mr. I. D. O'Donnell, of Billings, Mont. He attended the convention of the Trans-Mississippi Commercial Congress at Wichita, Kan., May, 1899, and that congress strongly endorsed the National Irrigation movement. The National Association was organized at that time at Wichita. Mr. O'Donnell was one of the moving spirits in its organization, and is now vice president of the association for Montana.

Irrigation of any considerable area of land is beneficial in a multitude of ways that will not be apparent to those who have not given the subject mature and deliberate consideration. It lends itself naturally to diversified farming, and tends to make the population self-sufficient within itself. It has a tendency to discourage the production of single line crops, and helps to make families independent by producing the variety of things they consume, and this tendency is steadily growing. Diversified farming, which irrigation promotes, will be an important element in contributing to the independence of the people who will in the near future inhabit and till the soil of the great arid regions.

Where the water is not under speculative control, and the lands can only be cultivated by the artificial application of water, the realty holdings are small. This is a natural consequence, for the reason that irrigation multiplies and intensifies the productive ability of the lands, and demands a proportionate increase of labor upon them. Agricultural labor on irrigated lands calls for intelligent attention and close application, and is performed more by the resident agriculturist than by the employed farm hand, and the result is a multitude of small proprietors personally performing or attending to the work of their limited holdings. These results of irrigation have been demonstrated in every locality where the artificial watering of the lands made the diversification of the soil products possible, and as both the climatic and soil condi-



tions of the arid portions of Montana would not only allow, but would demand the widest range of diversification, the increase of the most desirable of citizens that would come to the state with the irrigation of semi-arid districts, would be very large.

One of the evils of the irrigated home under individual irrigation, is its isolation. Where individual rights have been acquired the streams are small and the valleys are narrow, and the inducements of the public range that lies back of the valley, and the natural restriction of the easily irrigable area, have induced the location of narrow strips of land along each side of the valley streams, and this has resulted in the wide separation of the farm homes and a loss to the resident families of the privileges of schools, churches and of social life. With the irrigation of large tracts of bench and prairie under the auspices of the Federal government, there would be a home on every eighty or at the most on every 160 acres, and the privileges of civilization that have been lost under the individual appropriation of water, would be restored. The agricultural society, when occupying areas irrigated by the general government, will enjoy a happy combination of village and country life. It will have convenient access to libraries, schools, churches and local entertainment, because the population will be of sufficient density to both warrant and demand the privileges, and the people of every agricultural community will have the independence which springs from the proprietorship of the soil, and the satisfaction of the instinct which comes only with the community of association. The irrigation of the great plains of the arid west will give the nation a new continent where every condition will be favorable to the rapid growth and development of the best forms of civilization, and of the noblest institutions.

The east, equally with the west, when it comes to consider the question in its broadest sense, looking at it from the interests of an undivided country, where the prosperity of a part must of necessity contribute to the prosperity of the whole, will give a united support to securing the storage and diversion of its western streams for the irrigation of its hundred million acres of irrigable lands; the harnessing of its water powers to mill and factory wheels; the crowding of its pastures with added millions of livestock; the conversion of its forests into human and industrial habitations, and the providing of prosperous and happy homes for millions of people.

The people of the whole country are becoming alive to the fact that the creation and distribution of the untold millions of wealth that lie latent in the west, awaiting only the magic touch of water to flow forth, would benefit every class of people of every section of the country. The benefits would come to the millions of new home-builders in the west, the eastern merchants and manufacturers, and merchants who would supply the new markets thus created, the workers in the factories of the east who would be called upon to make the things the new settlers of the west would want, and the agriculturists of the east would be specially benefited by supplying the demands of the new factory workers. No product of the land of this distant west would ever come into competition with that of the eastern farmer.

The rapidly multiplying millions of the east are beginning to see, as they

never saw before, that they need but to reach out their hands to open for themselves the gateway to the great west of the future, with all its boundless opportunities for wealth production, and for building homes and prosperous communities. The people of the east are not heedless of the prophecy of Macaulay, of which Garfield said that when he first read it "it startled me like an alarm bell at night." They see that we have already in the east our Birmingham and Manchesters, and that "in these Birmingham and Manchesters hundreds of thousands of artisans will assuredly be some time out of work." But as they turn to the west they see that we still have, to quote Macaulay's words, "a boundless extent of fertile and unoccupied land," needing only the touch of water to be made productive. And they see that for years to come there is an outlet for all our surplus labor in the reclamation and settlement of this great domain of arid land in the west.

Writing in the *North American Review* some ten years ago, General Nelson A. Miles said the subjugation of the deserts of the west and their complete conquest of this great empire will be the grandest achievement of the people of this nation in the early years of the twentieth century.

The "Open Sesame" which will swing back the gates leading to the greater west, and open them to this vast army of home-builders has been found. It has been evolved from the experiences of twenty years of preliminary irrigation development, and from the investigation of eminent experts and engineers of the government, and from the deliberations of the annual sessions of the National Irrigation Congress for the last eight years, and it has finally crystallized in the constitution of the National Irrigation Association.

It is the inauguration of a broad national policy under which our forests shall be preserved and re-forested, and the Federal government, owning 100,000,000 acres of irrigable land, shall build the great canals and irrigation works necessary for its reclamation which are beyond the scope of private capital, and shall build great reservoirs to store the flood of waters and stop the destruction they now cause as they run to waste; and that not another acre of public land shall be hereafter given to any state or territory, or to any one but an actual home-builder on the land.

The recent convention of the National Irrigation Association held in the city of Chicago was marked by thoughtful, energetic and co-operative sentiment and action and its deliberations have already done much in advancing the popular project throughout the middle states and east. The problem under consideration was recognized at its true value; the most prominent business men of that city attended the meetings and participated in the deliberations, extending their hearty support; the press extended its columns to the uses of the association, and the eastern correspondents gave it extended consideration.

Among those who were present at the convention representing Montana, were Hon. T. C. Power, Oscar Bradford, George M. Hays, John T. Murphy, A. T. Newberry, Helena; Rev. A. Wormser, Wormser; Lee Sedgwick, W. B. Sands and wife, M. A. Arnold, H. C. Reynolds and wife, Chinook; Major C. R. A. Scoby, Poplar; Hon. A. W. Mahon, Dr. M. D. Hoyt, Glasgow; W. P. Wren, L. G. Phelps, Great Falls; I. D. O'Donnell, Hon. C. Yegan, Billings;

W. E. Ellis, Butte; W. M. Wooldridge and wife, Hinsdale; Dr. F. W. Traphagen, Prof. Samuel Fortier, J. B. Berglean, Prof. S. M. Emery, Bozeman; Hon. T. M. Everett, Harlem.

I. D. O'Donnell, of Billings, was elected as executive chairman for Montana, and W. M. Wooldridge of Hinsdale as vice-president for Montana.

The St. Mary's Lake project that was surveyed during the past summer and fall under the auspices of the United States Geological Survey, was gone into in detail at the Auditorium theater. The lecture was illustrated by numerous stereopticon views, taken in the territory through which the canal must pass. The proposition has been found to be entirely feasible and practical. There are several routes through which it may pass. It is merely a question of selecting the best one.

The consensus opinion of the delegates of the convention was that the general government should construct the reservoirs and the canals through the foothill districts, and that the people should build the distributing system. The growth of the national irrigation sentiment among the business men of the east, and the active co-operation afforded by them was evident and acknowledged.

Among the most notable papers read at the convention, was one from Gen. Nelson A. Miles, who said that some of the oldest lands of history are now all arid, having in their day grown rich and powerful solely because they farmed these arid lands from choice, and with a water supply altogether artificial. Historically considered, the moist lands and the humid regions were the last to be occupied by a high civilization, and among the original enterprises of mankind was the making certain of the food supply without reference to the uncertain rainfall of any given year.

The question of irrigation in the United States has in recent years become a topic of absorbing interest. The public lands which are arable and lie in the humid and sub-humid regions are practically all now occupied, and the process of spreading out and occupying has had its first check. Yet the soil of the arid region is very rich. There is every inducement to settlement if there were only a certainty of even a half supply of water.

It is rapidly becoming a settled conviction that individual enterprise can never entirely and inadequately solve the problem of western irrigation. The task is a vast one, extending far beyond state lines and individual interests. In view of the fact that there are vast areas of the public domain still remaining unoccupied, it might be well for the government to devise some system by which these lands may be utilized and colonized for the benefit of the home-builders who constitute our best population.

The government of our country has an important mission to perform, now that it has once taken charge of the work, and it is presumed that it will continue until a time when the entire irrigation system will be under its control, with one simple law governing it alike in all the western states and territories. The enormous amount of money required to place the desert lands in a productive state would have to be furnished by the government, as it would be impossible for the states and territories to complete so vast a system as must be undertaken, and the funds expended should, by a well-



matured and comprehensive plan, revert again to the treasury of the general government from the sale of its lands thus improved.

The state of California is blessed with prosperity derived from its irrigating works, and is fast being populated with a prosperous class of agriculturalists who have been brought thither mainly through the success of irrigation.

To pass from the hot, arid regions into the fertile valleys of California is as gladdening to the eyes of the beholder as the sight of an oasis is to the traveler in the desert. To see the countless acres of trees with their ripening fruit, the unlimited acres of grapes, fields of wheat, barley and alfalfa, and everything breathing life and health, is to see the blessed use of water, husbanded and cared for and appreciated in all its worth. Without irrigation, except in certain moist lands, these beautiful valleys and lowlands once more revert to desert wastes.

It is a well-known fact that after land has been thoroughly cultivated by irrigation less water is required; and it is safe to assert that thousands of acres of so-called desert land may become adapted for agricultural purposes without the quantity of water at first necessary.

Extravagance in expenditure should be avoided and the government should systematically improve only its lands which will repay the expenditure, and divide the same in such manner that it can never be monopolized by a few, but shall be cultivated by an industrious, enterprising, and intelligent people, who will build for themselves and their posterity homes that will enrich and beautify the region, thus sustaining and promoting the general welfare.

Mr. Alexander H. Revell spoke on "The Grandest Opportunity in the Pathway of Nations."

"America" said Emerson, is another name for "opportunity." Opportunities come to nations as well as to individuals. Will the United States as a nation avail itself of one of the grandest opportunities that has ever fallen in the pathway of nations? The advantages to the commercial and manufacturing interests of the country from the rapid settlement of the arid region are manifest. But there is another point of view far more important from which I have looked at the matter and which seems to me to be worthy of the most serious consideration. The population of our great cities and manufacturing centers of population are becoming congested. We need an outlet for our surplus population. The next great problem we must face is the relief of the crowded conditions of our centers and the amelioration of distress of the poor in our great cities. Probably no greater problems than these can be brought before the people of the United States at this time, and may we not find in this movement to reclaim arid lands—a solution, which will bring about results at once far-reaching and beneficial? If these government lands were provided with water for irrigation, many of the poor could get five, ten, fifteen or twenty acres of land and thus become independent. I believe it would be a great benefit to all our people if the government would adopt a policy, under which the many million acres of government land, which can be reclaimed by irrigation, could be divided up into

small tracts and settled by industrious farmers. Will the opportunity and the burden be accepted by the nation as a nation? Or will the great work be divided among a thousand money-making land and water companies aiming to make vast profits to be taken from the poor whose hopes are for freedom and independence, but who would be mortgaged, bound hand and foot for a hundred years? We find the answer springing from millions of true hearts from all parts of our country—"The Nation will do it."

Speaking on the subject in a general line, F. H. Newell, chief hydrographer of the United States Geological Survey, and that one-third of the whole United States, exclusive of Alaska and outlying possessions, is vacant and at the disposal of congress. For the most part it is open to homestead entry and settlement, and much of it consists of land possessing great fertility except for the lack of water. At intervals are to be found mountain masses from which come perennial streams whose waters are now used to a small extent to moisten the lands. At intervals there occur local storms or floods inundating large tracts. There is ample water for the reclamation of a considerable portion of this arid land, if it would all be saved and put to use. Attempts have been made by individuals and by corporations to construct ditches, canals and reservoirs to supply the lack of moisture. As a rule the smaller works taking water from perennial streams have been not only been successful but sources of great profit to the owners. The great storage reservoirs and canals are comparable in one sense to lighthouses and harbor improvements; they are necessary and worth far more than they cost but under existing state of civilization they cannot be made to contribute exclusively to the welfare of the builders. The indirect gain or unearned increment of value is so widely diffused that the general public reaps the largest reward.

We are confronted with a situation where there is a vast amount of fertile land to be reclaimed and considerable quantities of water to be conserved to this thirsty land. By such action millions of homes can be created and the commonwealth enormously strengthened, by the addition of a producing population where each head of family owns and lives upon his farm. To bring about this happy result it is impossible to trust speculative enterprise, because of the fact that profits cannot be made in the construction of a work, unless the population becomes tenants of a great land-owning monopoly.

At the conclusion of the convention, the following resolutions were unanimously adopted:

"We hail with satisfaction the fact that both of the great political parties of the nation in the last campaign declared in favor of the reclamation of arid America, in order that settlers might build homes on the public domain, and to that end we urge upon congress that national appropriations commensurate with the magnitude of the problem should be made for the preservation of the forests and the reforestation of denuded areas as natural storage reservoirs and other works of flood protection and to save for use in aid of navigation and irrigation the waters which now run to waste and for the development of artesian and subterranean sources of water supply.

"The waters of all streams should forever remain subject to public control and the right of the use of water for irrigation should inhere in the land irrigated, and beneficial use be the basis of measure and the limit of the right.

"The work of building the reservoirs necessary to store the floods should be done directly by the government under existing statutes relating to the employment of labor and hours of work and under laws that will give to all American citizens a free and equal opportunity to get first employment, and then a home on the land.

We commend the efficient work of the various bureaus of the national government in the investigation of the physical and legal problems and other conditions relating to irrigation and in promoting the adoption of more effective laws, customs and methods of irrigated agriculture, and urge upon congress the necessity of providing liberal appropriations for this important work.

The objects of the National Irrigation association as expressed in its constitution, are to accomplish the following purposes:

The adoption by the Federal government of a permanent policy for the reclamation and settlement of the public domain under which all the remaining public lands shall be held and administered as a trust for the benefit of the whole people of the United States, and no grants of the title to any of the public lands shall ever hereafter be made to any but actual settlers and home-builders on the land.

The preservation and development of our national resources by the construction of storage reservoirs by the Federal government for flood protection, and to save for use in aid of navigation and irrigation the flood waters which now run to waste and cause overflow and destruction.

The construction by the Federal government of storage reservoirs and irrigation works wherever necessary to furnish water for the reclamation and settlement of the arid public lands.

The preservation of the forests and reforestation of denuded forest areas as sources of water supply, the conservation of existing supplies by approved methods of irrigation and distribution, and the increase of the water resources of the arid region by the investigation and development of underground supplies.

The leasing of public grazing lands which are unsuitable for agriculture at a nominal rental in limited areas to settlers farming adjacent lands, the revenue from rentals to be used for irrigation development in the states and territories wherein the lands are situated, leases to be subject to right of reclamation by irrigation, and of settlement of lands actually reclaimed, title of land to remain in Federal government until actual settlement.

The adoption of a harmonious system of irrigation laws in all the arid and semi-arid states and territories under which the right to the use of water for irrigation shall vest in the user, and become appurtenant to the land irrigated, and beneficial use be the basis and the measure and limit of the right.

The holding of an annual irrigation congress, and the dissemination by public meetings and through the press of information regarding irrigation, and the reclamation and settlement of the arid public domain, and the possibili-



ties of better agriculture through irrigation and intensive farming, and the need for agricultural education and training, and the creation of rural homes as national safeguards, and the encouragement of rural settlement as a remedy for the social and political evils threatened by the congestion of population in large cities.

All applications for membership shall be submitted to the executive committee, and when approved by them the applicant shall be enrolled as a member by the recording secretary, and be entitled to a certificate of membership on payment of the annual dues for the first year.

The executive committee may enroll as an affiliated member of this association, and issue a certificate of membership to any other association or organization, which shall extend its support and co-operation to this association by a resolution endorsing the national irrigation policy advocated by this association, and the president or any representative delegated by such affiliated association or organization may represent it in any meeting or congress held by this association, and no fees or dues shall be payable to this association by any such affiliated association or organization, or its said president or representative.

The executive committee may enroll as an honorary member of this association, and issue a certificate of membership to any state or federal officer or appointee, or the editor or publisher of any newspaper or journal, or the president of any university or college, or person eminent in scientific or educational or philanthropic work, and no fees or dues shall be payable by honorary members. Honorary vice-presidents of the association may be chosen by the executive committee from the honorary members of the association.

The following is a brief summary of the policy advocated by the National Irrigation association for the rapid settlement and development of the western half of the United States:

First—The adoption by the Federal government of a permanent policy for the reclamation and settlement of the public domain under which all the remaining public lands shall be held and administered as a trust for the benefit of the whole people of the United States, and no grants of any of the public lands shall ever hereafter be made to any state or territory to any but actual settlers and home-builders on the land.

Second—The Federal government now owns one hundred million acres of land which is worthless only because arid. If reclaimed by irrigation it would become marvelously productive and sustain a dense population.

It is proposed that the government shall build the large irrigation works necessary for the reclamation of this arid land, so as to bring the waters that now go to waste within reach of private enterprise, and then sell the land with an interest in the water to actual settlers in small tracts, for enough to cover the entire cost of reclamation, in addition to the government price of the land.

The government would thus be reimbursed, from the sale of the land, for its entire expenditure, besides realizing many millions in addition from what is now a worthless asset, and transforming uninhabitable wastes into fertile fields and farms and prosperous communities.

Third—It is proposed that the west shall hereafter have a fair share of each river and harbor bill, as recommended in the Chittenden report, to build storage reservoirs to store the waters that now cause overflow and destruction as they go to waste in winter floods.

The government would be reimbursed for these appropriations, just as for other improvements of rivers and harbors, through the general development and prosperity of the country and the increase of commerce.

Besides this, a reasonable increase in the price of the 100,000,000 acres of irrigable public land, when reclaimed by irrigation, would far more than cover the cost of all reservoirs the government would build.

The carrying out of this policy by the national government would be equivalent to the creation and annexation to our national domain of so much new territory. If its original acquisition under the Louisiana purchase was a wise policy, it must be equally wise to make that land habitable. It can never be done by private enterprise. The irrigation works necessary for its reclamation must be built on too large a scale.

Whatever there may be of opposition to this policy arises from misapprehension. Some think it is proposed to involve the Federal government in large expenditures without returns. This is a totally erroneous view. On the contrary, the government would get back from sales of its now worthless arid lands, many millions in excess of all its expenditures.

It is conceded that the western half of the United States would support a greater population than the whole United States contains to-day, if the waters which now go to waste were saved and utilized for irrigation. The inauguration of the policy advocated by the National Irrigation association would increase population in the west with marvelous rapidity and enormously enlarge the demand for everything the west buys from the eastern merchant and manufacturer.

An effort is being made in the present session of congress to secure funds for the preliminaries of active work of construction, and it must be hoped by the broadminded and appreciative citizen of every part of the country that the first definite step toward securing the reclamation of the arid portions of the west will be ungrudgingly taken and that after the work has once commenced, it will be carried to an uninterrupted conclusion.

# The Use of Water in Irrigation.

(By S. Fortier, Director Montana Agricultural Experiment Station.)

During the past forty years large quantities of water have been diverted from the natural streams of Montana through thousands of ditches and canals. These artificial water-ways have cost vast sums of money and it is difficult to estimate the value of the water conveyed by them when applied to the fertile lands of the state.

Notwithstanding this large outlay in both labor and capital as well as the necessity which exists in nearly every section for an additional supply of moisture over that which nature provides, little has as yet, been done to ascertain what use was being made of the large volumes that were diverted.

The Montana Experiment Station, recognizing the important relation which water bears to agricultural products, was one of the first, if not the first to undertake this work. For the past two seasons experiments have been carried on in co-operation with the office of Experiment Stations at Washington, D. C., to find out the actual quantities of water used in irrigation. The experiments have been conducted under varied physical conditions, with different crops and in widely separated districts of Montana.

The following brief summary of the results of twenty of these tests may convey some idea of the nature of these investigations. In the accompanying table, the quantity of water applied throughout the season is expressed in feet and indicates the depth of water over the entire surface irrigated.

THE QUANTITY OF WATER USED IN IRRIGATION.

Year.	KIND OF CROP.	Area Irrigated.	Depth of Water Received.			Yield Per Acre.	REMARKS.
			Irriga- tion.	Rain- fall.	Total.		
		Acres	Feet	Feet	Feet		
1899	Red Clover ..	27.44	1.02	0.44	1.46	3.0 tons	Irrigated twice.
1899	Peas ..	4.23	1.10	0.41	1.51	31¼ bush.	Irrigated twice.
1899	Barley and Wheat ..	11.27	1.98	0.42	2.40	51½ bush.	Irrigated twice.
1899	Barley ..	66.39	0.98	0.41	1.39		Irrigated once.
1899	Oats ..	23.41	1.58	0.38	1.91	51 bush.	Irrigated once.
1899	Oats ..	7.26	1.34	0.36	1.70	72¾ bush.	Irrigated twice.
1899	Oats ..	2.48	2.16	0.35	2.52	72¾ bush.	Irrigated twice.
1899	Oats ..	25.09	1.28	0.44	1.72		Irrigated once.
1900	Red Clover ..	66.39	1.98	0.44	2.42		Irrigated twice.
1900	Barley ..	4.14	1.50	0.28	1.78	46½ bush.	Irrigated twice.
1900	Oats ..	25.09	0.64	0.39	1.03		Irrigated twice.
1900	Barley ..	1.00	1.17	0.28	1.45	87 bush.	Irrigated twice.
1900	Oats ..	8.51	1.39	0.40	1.79	75 bush.	Irrigated twice.
1900	Barley ..	4.52	1.96	0.42	2.38	69 bush.	Irrigated twice.
1900	Clover ..	7.26	2.70	0.44	3.14	5 tons	Irrigated four times.
1900	Red Clover ..	35.90	1.79	0.44	2.22	4 tons	Irrigated three times.
1900	Alfalfa ..	53.40	1.30	0.44	1.74	51-5 tons	Irrigated once.
1900	*Apple Orchard ..	40.00	1.46	0.13	1.57		Irrigated four times.
1900	Oats ..	161.70	1.30	0.13	1.42	33 bush.	Irrigated twice.
1900	Oats ..	102.20	6.06	0.13	6.17	34 bush.	Irrigated twice.

\* Trees five years old.



Considerable work has also been done by the same agencies in determining the loss due to seepage from the larger canals of the state.

When it is not known how much water escapes through the porous materials which form the channels of earthen canals it is impossible to apportion equably the flow between the various stockholders. The quantity wasted in this way may vary all the way from 10 to 50 per cent of the total flow. When the seepage is unknown the loss is usually borne by those who take water from the lower half of the canal.

Some of the results of seepage investigations are given in the following table:

SEEPAGE LOSS FROM CANALS.

NAME OF CANAL.	LOCALITY.	Total Volume Received.	Length of Section.	Loss in Section.
		*Sec. Ft.	Miles	Sec. Ft.
1899.				
Middle Creek Canal .....	Gallatin County .....	98.9	4.00	21.50
1900.				
Middle Creek Canal .....	Gallatin County .....	63.04	4.00	12.24
Farmers' Canal .....	Gallatin County .....	133.09	10.75	23.59
West Gallatin Irrigation Canal .....	Gallatin County .....	114.45	38.75	39.78
Big Ditch .....	Yellowstone County ..	254.47	22.00	65.05
Republican Canal .....	Ravalli County ..	120.49	12.20	38.84

\* One second foot is equal to 40 Montana miner's inches.

The information now available on the water supply of this state has been chiefly derived from researches made by the hydrographic division of the United States Geological Survey.

Some time ago, Mr. Newell, the chief of that division, appointed the writer, the local hydrographer for this state. The results of the stream measurements made during the past season are not yet computed, but the following tables giving approximate results are herewith presented in order to show the scope of the work. These figures representing the summer flow of four Montana streams are expressed in second-feet. Since there are 40 miner's inches in each second-foot the figures may be readily converted into miner's inches by multiplying each by 40. These measurements only cover rivers of the southeastern portion of the state. Other portions of the state have a water supply equally abundant.

The discharge of the Yellowstone river near Livingston, Mont., for every alternate day from May 1, to October 31, 1900, expressed in second-feet.

DAY.	May.	June.	July.	Aug.	Sept.	Oct.
1 . . .	2,490	10,650	7,275	3,345	2,125	1,715
3 . . .	3,060	12,490	6,602	3,242	2,050	1,760
5 . . .	4,730	13,230	6,220	3,060	2,050	1,715
7 . . .	5,745	15,350	5,792	2,990	2,000	1,715
9 . . .	6,924	14,535	5,505	2,922	1,950	1,670
11 . . .	10,370	10,875	5,162	2,790	1,900	1,623
13 . . .	9,140	10,250	4,830	2,725	1,900	1,585
15 . . .	5,980	12,740	4,630	2,665	1,850	1,542
17 . . .	6,420	12,025	4,345	2,547	1,805	1,585
19 . . .	5,697	10,650	4,250	2,419	1,850	1,585
21 . . .	6,148	11,105	4,075	2,432	1,805	1,585
23 . . .	7,059	11,014	3,900	2,375	1,760	1,585
25 . . .	7,934	10,137	3,730	2,375	1,760	1,542
27 . . .	12,490	9,249	3,730	2,317	1,715	1,542
29 . . .	13,374	3,155	3,575	2,260	1,715	1,542
31 . . .	10,650	.....	3,420	2,150	.....	1,500

The discharge of Gallatin river at Logan, Montana, for every alternate day from May 1, to October 31, 1900, expressed in second-feet.

DAY.	May.	June.	July.	Aug.	Sept.	Oct.
1 . . .	1,575	3,870	605	290	400	530
3 . . .	1,638	4,240	530	290	460	530
5 . . .	1,950	4,333	460	290	460	643
7 . . .	2,665	4,520	460	290	460	680
9 . . .	2,665	3,685	400	345	460	605
11 . . .	3,585	2,580	345	345	460	605
13 . . .	4,240	2,210	240	345	460	605
15 . . .	3,193	1,763	240	345	460	605
17 . . .	2,995	1,575	240	345	460	605
19 . . .	2,995	1,235	240	345	530	605
21 . . .	2,995	1,080	240	345	530	605
23 . . .	2,995	1,030	240	345	530	605
25 . . .	3,565	940	240	345	530	605
27 . . .	4,333	850	290	400	530	605
29 . . .	4,805	680	290	400	530	605
31 . . .	4,240	.....	290	400	.....	605

The discharge of the Madison river at Red Bluff, Montana, for every alternate day from May 1, to October 31, 1900 expressed in second-feet.

DAY.	May.	June.	July.	Aug.	Sept.	Oct.
1 . . .	3,005	4,840	2,075	1,640	1,640	1,850
3 . . .	4,050	5,100	1,863	1,640	1,640	1,850
5 . . .	4,185	5,238	1,850	1,640	1,640	1,850
7 . . .	3,913	5,375	1,850	1,640	1,640	1,850
9 . . .	4,185	5,100	1,850	1,850	1,640	1,850
11 . . .	4,710	4,840	1,850	1,850	1,850	1,850
13 . . .	5,100	4,050	1,850	1,640	1,640	1,850
15 . . .	4,450	3,515	1,850	1,640	1,640	1,850
17 . . .	3,775	3,005	1,850	1,640	1,640	1,850
19 . . .	3,260	2,580	1,850	1,640	1,640	1,850
21 . . .	3,645	2,300	1,850	1,640	1,640	1,850
23 . . .	3,133	2,188	1,850	1,640	1,640	1,850
25 . . .	4,185	2,075	1,850	1,640	1,640	1,850
27 . . .	5,100	2,075	1,850	1,640	1,850	1,850
29 . . .	5,655	2,075	1,850	1,640	1,850	1,850
31 . . .	5,170	.....	1,640	1,640	.....	1,850

The discharge of the Jefferson river at Sappington, Montana, for every alternate day from May 1, to October 31, 1900, expressed in second-feet.

DAY.	May.	June.	July.	Aug.	Sept.	Oct.
1 . . .	3,875	5,895	1,870	600	515	1,090
3 . . .	4,050	5,515	1,590	600	515	1,265
5 . . .	4,405	5,895	1,455	515	600	1,455
7 . . .	5,063	5,705	1,455	515	600	1,455
9 . . .	5,610	5,335	1,325	515	600	1,455
11 . . .	6,360	4,970	1,205	515	685	1,455
13 . . .	8,045	4,050	1,205	515	685	1,325
15 . . .	8,923	3,875	980	515	685	1,325
17 . . .	8,720	3,875	775	515	685	1,325
19 . . .	8,045	4,225	685	515	775	1,205
21 . . .	8,543	3,875	685	515	875	1,205
23 . . .	6,950	2,810	685	515	875	1,325
25 . . .	6,650	2,485	685	515	875	1,325
27 . . .	6,450	2,170	600	475	980	1,455
29 . . .	6,650	2,020	600	475	980	1,455
31 . . .	6,178	.....	600	515	.....	1,455

## The Stock Interests of the State.

The Past Season Has Been Prosperous and the Prospects for the Future are Good—Reports of the Industry.

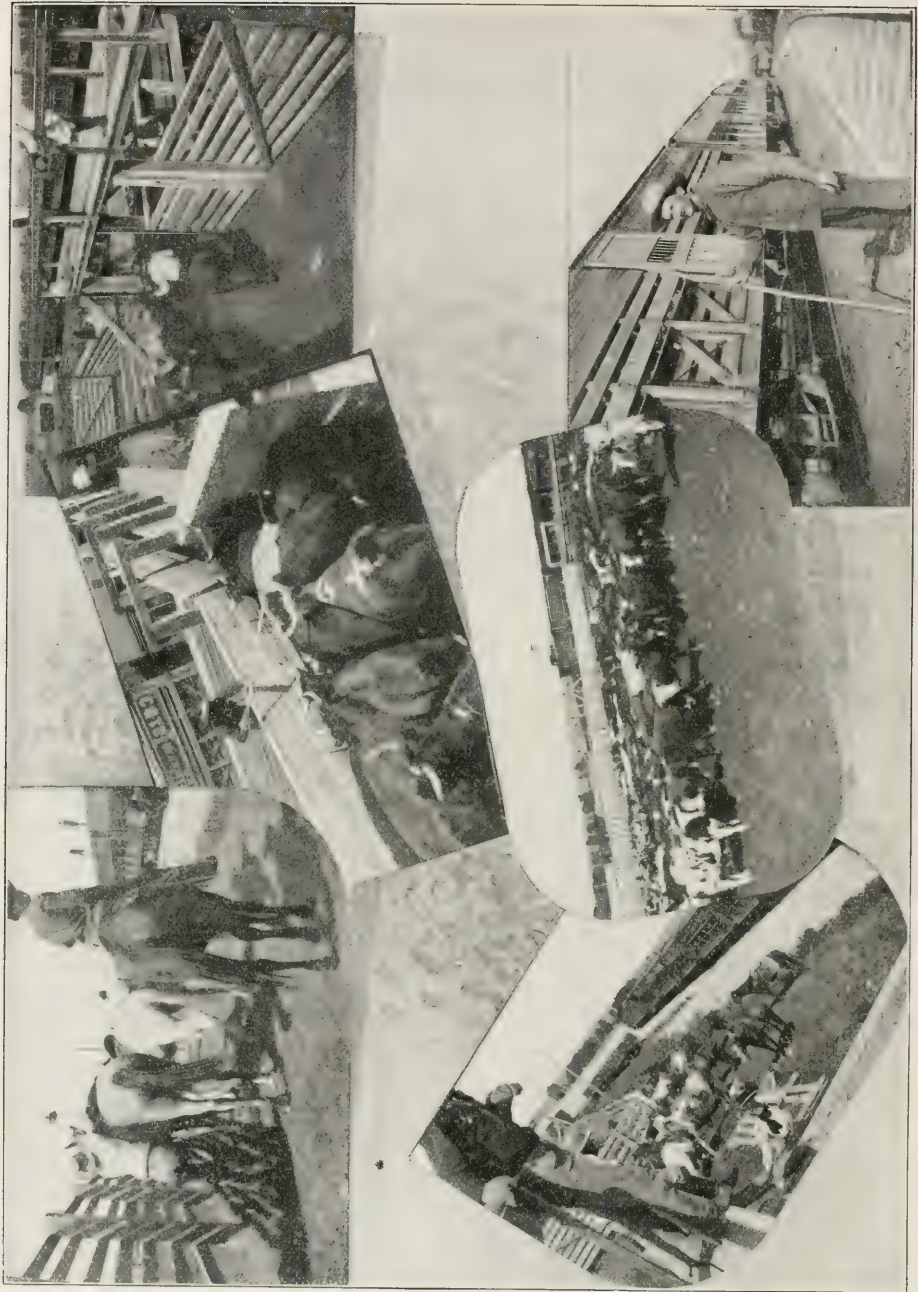
The cattle men of Montana have not had any reason to complain of conditions that have obtained in their industry during the past year, and in fact, it is seldom that those following this pursuit in Montana have any legitimate causes for complaint. Shipments during the past season have been close and the average price received for choice rangers was \$4.50 per hundred pounds, and the poorer stock brought good prices. One of the benefits that will accrue from the year's close shipping is that it will greatly relieve the winter range. The feed during the summer season was abundant and will be for the winter season, providing the snowfall is not so heavy that it covers the comparatively short growth. The winter season up to the date of the closing of this volume, has been especially favorable to stock, as it has been exceptionally mild, with just enough snow to allow stock to leave the streams and feed farther back on the range, and there have been no bad storms or extreme cold. A very large majority of the growers are prepared to feed for a considerable length of time, and as the season has not yet drawn upon their supplies, it may be safely predicted that the herds will come through the balance of the winter in excellent form, no matter what the weather conditions may be for the ensuing portion of the winter.

The following table shows the receipts of range cattle at Chicago by months, for the past four years:

Month.	1900.	1899.	1898.	1897.
July .....	5,700	.....	.....	.....
August .....	45,100	26,600	40,742	39,200
September .....	49,600	67,800	84,756	99,600
October .....	39,700	67,900	52,327	76,700
November .....	2,500	15,000	17,350	21,100
Total .....	142,500	177,300	195,175	236,600

The Chicago stock report says that the bulk of good to choice rangers, taking the season as a whole, sold between \$4.50 and \$5, with a considerable number above \$5. During the first half of the season sales of extra good cattle between \$5 and \$5.35 were not uncommon, the latter figure being high water mark for any considerable number. It was first touched on August 23,





SCENES IN THE CATTLE INDUSTRY.

a string of C. J. Hysham's Montanas (of the old Murphy brand) landing at that figure, and later in the season one or two other small lots achieved the same distinction. Last season \$5.40 represented the extreme top of the market, this price having been paid for a few small bunches of extra choice hay fed steers, but the legitimate top for straight range cattle was the same as during this season—\$5.35.

The same authority gives the following as the top prices received in the Chicago market during the past twelve years:

1900.....	\$5.35	1894.....	4.90
1899.....	5.40	1893.....	4.75
1898.....	5.00	1892.....	4.60
1897.....	4.90	1891.....	5.60
1896.....	4.25	1890.....	4.50
1895.....	5.10	1889.....	4.10

The report of the State Board of Stock Commissioners says:



BRANDING HORSES.

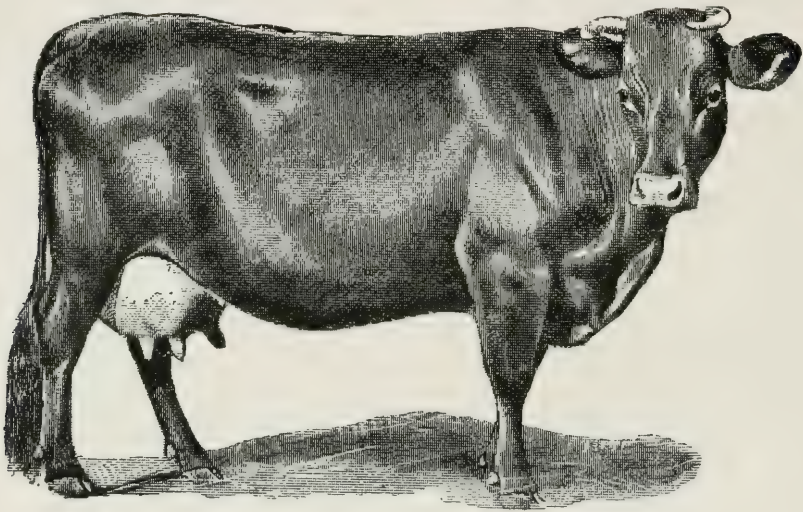
"As a result of the rigid economy practiced by the board during the past 10 years, its finances have been placed on a sound basis, and the fund at its command will now permit the accomplishment of a much greater and more satisfactory work than in past years. Inspection was more liberally apportioned during the year 1900 than during any previous year. Owing to this fact, and we believe that, great as have been the benefits of the board's work to stockmen in past years, it will prove vastly more so in the future."

The board gives the following as the regular inspection force: At Chicago, R. P. Heren, C. L. Heren; St. Paul, H. E. Bourdette; Omaha, R. H. Rickard; Miles City, W. D. Smith; Billings, J. W. Collins; Helena, E. K. Preuitt; Fort Benton, Harry Lund; Lewistown, E. D. Bowmer; Butte, Frank Carter; Dillon, N. W. Staudaher; Madison County, W. W. Green; Valley County, C. S. Stafford, at Culbertson; Carbon County, Manford Engle. There are also a number of commissions held without compensation by the board, by



stockmen in various localities which gives additional protection to the stock interests, and A. A. Burbanks, of Cascade County, is commissioned as inspector, receiving compensation per diem for the actual time he is in engaged in inspection work. So it will be observed that the entire state has been quite thoroughly covered by the work of the inspectors and every county has received more or less direct inspection work. The regular inspectors, while keeping headquarters at some central point, are kept traveling to all parts of the state from which cattle or complaints emanate, and the work of the force of inspectors has been very satisfactory during 1900.

The inspection of cattle and horses at the markets has been maintained in the same efficient manner as in the past, and a complete record of all cattle shipped out of the state is kept on file for public inspection with the Montana



ONE OF MONTANA'S SOURCES OF REVENUE.

Stock Growers' association at its office in Helena. Proceeds of all strays recovered have likewise been forwarded to the secretary-treasurer of the association for disbursement to the respective owners, who are located by means of the general record of marks and brands. In all cases where owners file written application at Chicago for the remittance of their proceeds of strays direct without going through the process of being disbursed by the association, the request is always complied with, and in this manner the proceeds of about two-thirds of all the strays recovered go direct to the owners from the market points. The association keeps a complete record of all the cattle, however.

Cattle shipments for 1900 again fell short of the previous year by 10 to 12 per cent, which can be accounted for in the further shrinkage of the range cattle business. The steady and rapid settlement of the state is fast curtailing the range privileges, and while there was a decrease in the output, yet the total number of cattle remaining in the state doubtless shows a decided increase over the previous year, owing to the multiplication of small ranch herds, the increase of which aggregates more than the decrease in range herds. During the past year the inspectors' reports give a total of 120,055 head of



cattle shipped out of the state, including those sent to eastern markets, feeders shipped into the corn belt, and some 2,000 head that were sent to the Pacific coast markets. Slaughtering establishments on the coast are just learning the value of Montana beef, and it is not improbable they will create quite a valuable market there for Montana products inasmuch as they are unable to supply their own demand. In addition to the cattle shipments the home consumption is estimated at about 60,000 head, making the total beef output 190,055 for the year. Of this number there were 11,649 head of strays found by the inspectors, proceeds for 7,751 of them being remitted direct to owners, while the remaining 3,898 head were remitted for through the Montana Stock Growers' association.

The high prices of young stock were maintained, so that there is still a shortage in the number brought in to replenish the ranges, the total aggregating 70,000 head, of which 445 head were thoroughbred cattle for breeding purposes. Through this continued importation of fine breeding stock the quality of Montana cattle is steadily improving.

Notwithstanding the slump in the horse market, the average price on Montana horses has still been fairly good, and with the exception of the previous year, was better than for a number of years prior to 1900. As a result there was a continuance of the unusually heavy shipments of horses in 1899, and during 1900 the total shipments of horses from the state of Montana exceeded 70,000 head, nearly all of which were marketed in the farming districts of the Mississippi and Missouri valleys. This has served to clear the ranges in several counties of a most desirable class of livestock, which possessed little value and yet served to prevent stockmen from putting in some more profitable kind of stock.

We append hereto a statement of the cattle inspection work of the board since its organization:

Year.....	Cattle Inspected	Strays Recovered	Arrests....	Inspectors..	Year.....	Cattle Inspected	Strays Recovered	Arrests....	Inspectors..
1885 .. .. .	79,089	1,035	19	8	1893 .. .. .	279,153	17,565	13	14
1886 .. .. .	119,620	1,730	43	9	1894 .. .. .	302,655	19,855	23	12
1887 .. .. .	82,134	3,160	13	8	1895 .. .. .	306,460	24,245	29	16
1888 .. .. .	167,602	3,790	6	5	1896 .. .. .	254,864	20,275	52	16
1889 .. .. .	123,880	3,424	20	5	1897 .. .. .	252,162	19,104	81	15
1890 .. .. .	174,035	3,991	21	9	1898 .. .. .	232,225	16,058	72	15
1891 .. .. .	250,000	13,746	14	10	1899 .. .. .	203,498	10,756	60	21
1892 ... .. .	203,000	11,110	7	13	1900 .. .. .	180,055	11,649	65	21

There were 35,000 horses inspected in 1899, and 70,000 the past year, and in the latter year there were 41 estrays recovered.

The bounty law has been working most satisfactorily, and all old claims have been cleared up and a large cash balance accumulated for the payment of current claims. This will doubtless tend to stimulate hunters and trappers in the extermination of wolves, inasmuch as a cash bounty is a great incentive, and we believe there is little desire on the part of stockmen for any change in the present law.

Dr. M. E. Knowles, State Veterinarian, in his report to the Stock Commissioners, says that during the year 161 calls were answered to investigate

a variety of epizootics. Many of these, to be sure, were found upon investigation to be of a sporadic character, not at all serious in their nature; the main diseases of importance claiming our attention being glanders among horses, tuberculosis and blackleg among cattle, scab among sheep; and of a less serious nature, influenza and distemper among horses, scab and pink-eye or contagious ophthalmia among cattle.

During the year 62 head of horses were destroyed on account of glanders and 295 were quarantined on account of exposure to this disease.

Three hundred and eighty-one cattle were tested with tuberculin, 30 of



STARTING ON THE ROUNDUP.

which responded, showing unmistakable tuberculosis and were destroyed. Where practicable all such quarantined cattle were immediately released after being tested with tuberculin.

In one outbreak in Madison county, the animals being range cattle and impossible to test, were therefore detained in quarantine, at this date the order still remaining in force. It is interesting to note that out of the number found suffering from the disease but two were range cattle, the remainder being under close domestication. It is also the strongest possible evidence of the necessity for more careful sanitary supervision of our cattle under close domestication. In but one case did we discover a tubercular animal shipped from another state, and this was due to the fact of our having a quarantine proclamation against the introduction of breeding cattle from other

states without being accompanied by a health certificate and tuberculin test. This cow had been tested by the State Veterinarian of Illinois, found tubercular and condemned. The owner spirited the cow away by night and shipped her to Redwood Falls, Minnesota, from which point she was shipped to Granite county, this state, where I discovered her on information received from the Secretary of the Live Stock Commission of Illinois. The cow was destroyed, but no action was taken against the owner for the reason that at the time of notification by the secretary of the Live Stock commission of Illinois, he was absent from this state and proved beyond question that he had



DINNER ON THE ROUNDUP.

no knowledge of the condition of the cow until his return some weeks later.

Vaccination against blackleg has become more and more popular during the past three years as is evidenced by the following statement of vaccine distributed by private concerns and the United States government:

	1897.	1898.	1899.	1900. (9 mos.)
Private concerns .....	20	11,500	22,100	23,000
U. S. Department of Agriculture ... ..	..	400	1,415	34,985
Total .....	20	11,900	23,515	57,985
Grand total .....				93,420

The above figures are not entirely accurate so far as the private dealers are concerned for the reason that a considerable amount of their sales are



made to jobbing houses and from these concerns distributed to dealers throughout the northwest, but this is the estimate of concerns, and is sufficient to furnish a good idea of the growing popularity of the preventive, and also would seem to justify my efforts in agitating the idea among stock men immediately upon entering the office early in 1897. The fact is, that the twenty doses shipped into the state in 1897 were ordered by me personally, and from this number the use of the vaccine has increased to 57,985 for only the first nine months of the present year, or at the rate of 77,312 for the entire year. This speaks for itself.



LETTING THE STOCK GRAZE.

That all our cattle men are not as yet familiar with vaccination and its benefits is evidenced by the weekly receipt of letters from various localities throughout the state inquiring about vaccination, where to secure the vaccine, etc. I have endeavored through the public press to advise our cattle men of the fact that the government is supplying vaccine free of charge to all upon application. Those desiring blackleg vaccine should address the Bureau of Animal Industry, Department of Agriculture, Washington, D. C., when an application blank will be mailed them on which they can make their request and be supplied. I would suggest that it is always a good plan to apply for a few more doses than are actually required for the reason that there is always more or less waste. In addition to the vaccine it is only now necessary to procure the antitoxin syringe together with a porcelain mortar and

pestle that can be thoroughly sterilized by boiling. This outfit can be secured for a price not exceeding \$4.00 and will be serviceable for years if properly cared for. It is also an excellent idea to order a few extra needles with the syringe in case that those accompanying it may be broken.

By the above figures it will be seen that during the past three years the demand has more than doubled each year and should this obtain during the coming year a conservative estimate of the vaccine that will be used in Montana will probably exceed 150,000 doses annually. That vaccination has proven eminently successful is also evidenced by the figures given above. Personally I know of but two complaints and in both these instances the fault was probably with the operator and not with the vaccine. However, the method of applying the government vaccine is now much simplified as it is unnecessary to filter it. It is likely that the filtering process was responsible for failures in some instances.

Scab among cattle has been quite prevalent again this year in the northern part of the state, but the cattlemen, now appreciating its importance, are taking the matter actively in hand so that within a few years it will be stamped out, and practically unknown. Two dipping vats were constructed during the year for cattle, one by Mr. John Harris on Willow Creek, near the old station of Galata, and one by Mr. D. A. G. Flowerree, at Ethridge, on the line of the Great Northern. The Harris vat is a well constructed one in which cold dip was used during the past summer. The Flowerree vat is also an excellently constructed vat being provided with steam heating plant, complete in all its appointments. Hot lime and sulphur dip was used and this is believed to be the most efficient and cheapest remedy for this disease. As nearly as can be ascertained about 14,000 cattle were dipped and hand-treated for scab during the past year. On those that were hand-treated parafine oil containing about two per cent of sulphur was successfully and largely used. Many owners have used the more expensive lard, sulphur and carbolic acid with equal success.

A mild form of influenza among horses was prevalent throughout the state during the late summer and early fall. Where this disease was reported an effort was made to instruct the owners in the use of influenza antitoxin, which is a preventive, and has been used to a limited extent.

There have been no cases of hog cholera reported during the year, nor has there been a case of rabies among dogs.

Health certificates, including tuberculin tests, were received by this office for thoroughbred cattle imported from other states to the number of 445—350 bulls and 95 cows.

Health certificates issued for southern cattle by the government inspectors, Arizona, New Mexico, Texas, Kansas, Colorado, Nebraska and Wyoming veterinarians, were honored to the extent of 29,568.

Health certificates issued for horses, cattle and sheep leaving the state are as follows:

Horses .....	1,370
Cattle .....	7,552
Sheep .....	33,700
Total .....	42,622

## SEVENTH ANNUAL REPORT OF BUREAU

COUNTIES.	July, 1898			August, 1898.			Sept., 1898.			Oct., 1898.			Nov.,	
	Wolves ..	Coyotes ..	Amount ....	Wolves ..	Coyotes ..	Amount ....	Wolves ..	Coyotes ..	Amount ....	Wolves ..	Coyotes ..	Amount ....	Wolves ..	Coyotes ..
Beaverhead .. . . .	29	\$87	12	12		\$36	13	\$39	55	\$165	115			
Broadwater .. . . .	17	51	6	6		18	2	6	10	30	5			
Carbon .. . . .	25	75	19	19		57	14	42	3	9	32			
Cascade .. . . .	23	60	249	2	31	99	19	45	192	20	97	351	2	8
Choteau .. . . .	161	633	2,382	104	373	1,431	133	453	1,758	35	163	594	9	121
Custer .. . . .	326	464	2,370	344	233	1,731	168	124	876	164	257	1,263	92	268
Dawson .. . . .	99	83	546	78	149	681	10	31	123	23	59	246	24	
Deer Lodge .. . . .	8	24					8	24	5	15	4			
Fergus .. . . .	99	217	948	13	76	267	24	114	414	76	113	567	11	180
Flathead .. . . .	7	39	138	4		12	1	3	18	54	12			
Gallatin .. . . .	11	33	14	14		42	1	31	96	1	24	75	2	24
Granite .. . . .	9	27					15	45	4	12				
Jefferson .. . . .	7	21	3	3		9	1	3	6	18	4			
Lewis and Clarke ..	1	7	24	4	104	324	2	11	39	3	12	45	4	31
Madison .. . . .	11	33	16	16		48	40	120	9	27	37			
Meagher .. . . .	9	39	144	1		3	18	54	15	45	23			
Missoula .. . . .	39	117	2	2		6			4	12	9			
Park .. . . .	1	65	198	3		9	5	15	19	57	38			
Ravalli .. . . .	2	6							4	12	5			
Silver Bow .. . . .				1		3			3	9				
Sweet Grass .. . . .	15	67	246	11		33	7	34	123	3	55	174	5	82
Teton .. . . .	22	337	1,077	7	61	204	24	82	318	25	89	342	32	83
Valley .. . . .	89	196	855	66	384	1,350	1	107	324	6	133	417	30	202
Yellowstone .. . . .	121	151	816	4	64	204	24	68	276	27	102	387	55	368
Totals .. . . .	973	2,516	10,467	622	1,567	6,567	413	1,217	4,890	383	1,259	4,926	250	1,675



1898.	December, 1898.			January, 1899.			February, 1899.			March,	
Amount ....	Wolves ..	Coyotes ..	Amount ....	Wolves ..	Coyotes ..	Amount ....	Wolves ..	Coyotes ..	Amount ....	Wolves ..	Coyotes ..
\$345	.....	108	\$324	.....	85	\$255	.....	142	\$426	3	169
15	1	9	30	.....	38	114	.....	15	45	.....	9
96	8	62	210	1	9	30	1	17	54	.....	6
39	6	23	87	7	47	162	13	33	138	14	62
390	68	473	1,623	46	448	1,482	20	467	1,461	18	178
1,080	317	613	2,790	57	212	807	39	271	930	94	347
72	19	36	165	5	55	180	6	71	231	11	108
12	.....	18	54	.....	67	201	.....	48	144	.....	33
573	27	145	516	9	239	744	3	49	156	10	58
36	.....	31	93	.....	37	111	.....	22	66	.....	43
78	7	187	582	.....	83	249	1	44	135	1	69
.....	.....	18	54	.....	65	195	.....	6	18	.....	6
12	.....	18	54	.....	46	138	.....	15	45	.....	23
106	.....	8	24	.....	19	57	1	24	75	6	36
111	.....	70	210	.....	53	159	.....	15	45	.....	85
87	3	38	123	3	46	147	2	33	106	1	32
27	.....	131	393	.....	5	15	.....	46	138	.....	1
120	4	30	102	.....	22	66	.....	27	81	.....	15
15	.....	13	39	.....	6	18	.....	10	30	.....	35
.....	.....	.....	.....	.....	60	180	.....	14	42	.....	12
261	11	162	519	14	101	345	6	24	90	.....	75
345	8	156	492	4	32	108	7	95	306	14	134
696	9	461	1,410	9	237	738	5	251	768	5	158
1,269	25	147	516	18	111	387	13	73	258	16	144
5,775	513	2,957	10,410	173	2,123	6,888	117	1,812	5,787	193	1,838

## SEVENTH ANNUAL REPORT OF BUREAU

COUNTIES.	1899.	April, 1899.			May,	
	Amount ....	Wolves ..	Coyotes ..	Amount ....	Wolf Pups	Wolves ..
Beaverhead .....	\$516	.....	165	\$495	.....	.....
Broadwater .....	27	.....	3	9	.....	.....
Carbon .....	18	2	18	60	*19	*1
Cascade .....	228	36	82	354	*33	9
Choteau ....	588	108	346	1,362	*15	*7
Custer .....	1,323	308	475	2,349	*28	82
Dawson .....	357	137	102	717	.....	*9
Deer Lodge .....	99	.....	64	192	.....	111
Fergus .....	204	61	126	561	*41	*5
Flathead .....	129	1	16	51	.....	57
Gallatin .....	210	.....	15	45	.....	.....
Granite .....	18	.....	25	75	.....	1
Jefferson .....	69	.....	17	51	.....	.....
Lewis and Clarke .....	126	6	21	81	*17	26
Madison ....	255	.....	120	360	.....	*5
Meagher .....	99	10	43	159	.....	2
Missoula .....	3	6	65	213	.....	.....
Park .....	45	1	33	102	.....	*4
Ravalli.....	105	.....	27	81	.....	.....
Silver Bow .....	26	.....	16	48	*5	.....
Sweet Grass .....	225	6	46	156	*55	3
Teton .....	444	37	239	828	*12	*3
Valley .....	489	1	105	318	.....	*2
Yellowstone.....	480	144	85	687	.....	31
Totals .....	6093	864	2,254	9,354	*225	*44
					.....	427

1899.		June, 1899.				TOTALS.			
Coyotes ..	Amount ....	Wolf Pups	Wolves ..	Coyotes ..	Amount ....	Wolf Pups	Wolves ..	Coyotes ..	Amount ....
*7				*22					
22	\$80			50	\$194			994	\$2,962
*6									
	12						1	120	357
*2			*5	*32					
	9				89		18	239	749
*15		*21	*3	*66					
29	302		5	6	222	40	159	664	2,414
*45		*83	*14	*273					
206	1,055		3	5	806	116	808	4,184	14,932
*3		*55	*9	*10					
87	675		30	27	346	70	2,068	3,391	16,540
*33		*36	*17	*61					
70	528		11	6	330	64	478	888	4,176
*4				*7					
	8			4	26			270	799
*23		*28	*6	*160					
70	420			9	433	69	365	1,579	5,803
				*1					
3	9				2		8	227	704
*7				*53					
25	29			2	55			589	1,749
				*10					
					20			158	464
*4				*15					
7	29				30			166	479
*3		*4	*1	*28					
28	202		1	9	99	21	55	341	1,201
				*3					
9	27				6			468	1,401
*9			*2	*41					
32	145				92		43	370	1,203
*3									
	6			13	39		6	318	969
*11				*28					
35	147				56		12	331	998
*3				*23					
2	12			1	49			131	367
*1				*3					
	2				6			110	326
*4			*2	*26					
23	96		10	18	146	5	82	728	2,414
*94		*26	*3	*314					
94	802		2	42	827	81	257	1,852	6,093
*26		*155	*12	*544					
219	836				1,458	167	266	3,023	9,669
*8		*9	*4	*31					
20	142		5		115	9	474	1,372	5,357
*371		*417	*78	*1,751					
981	5,636		67	192	5,503	642	5,117	22,513	82,296

\* Claims issued under law of 1899.



## SEVENTH ANNUAL REPORT OF BUREAU

BOUNTIES PAID ON WOLVES AND COYOTES DURING THE YEAR 1900, AS  
REPORTED BY HON. T. S. HOGAN, SECRETARY OF STATE.

January.					March.				
Counties.	Wolf Pups	Wolves ..	Coyotes ..	Amount ....	Counties.	Wolf Pups	Wolves ..	Coyotes ..	Amount ....
Beaverhead .....			*22		Beaverhead .....		1	*2	
Broadwater .....			58	\$182	Broadwater .....		1	63	\$137
Carbon .....			4	8	Carbon .....		4	10	25
Cascade .....	3	6	19	43	Cascade .....		6	24	68
Choteau .....		9	16	68	Choteau .....		6	18	66
Custer .....	8	41	18	81	Custer .....		55	47	124
Dawson .....		6	134	494	Dawson .....		33	109	673
Deer Lodge .....			29	88	Deer Lodge .....			78	321
Fergus .....	9		14	28	Fergus .....	16		33	66
Flathead .....			*2		Flathead .....			*1	
Gallatin .....		1	*1	167	Gallatin .....		1	43	86
Granite .....		2	5	18	Granite .....			56	117
Jefferson .....			35	80	Jefferson .....			21	42
Lewis and Clarke ..	1	30	*7	29	Lewis and Clarke ..		4	18	36
Madison .....			4	22	Madison .....			38	96
Meagher .....			11	22	Meagher .....		8	82	164
Missoula .....			22	196	Missoula .....			56	152
Park .....			24	48	Park .....			19	38
Ravalli .....			*1	48	Ravalli .....			22	44
Silver Bow .....			17	28	Silver Bow .....			20	40
Sweet Grass .....			3	6	Sweet Grass .....		4	6	12
Teton .....			14	25	Teton .....		6	*1	
Valley .....			*2	42	Valley .....		4	15	53
Yellowstone .....			18	42	Yellowstone .....		30	33	96
Totals .....	12	133	*2	75	Totals .....	177	1,185	63	276
February.					April.				
Beaverhead .....			*37		Beaverhead .....			*4	
Broadwater .....			49		Broadwater .....			*1	
Carbon .....			387		Carbon .....			13	29
Cascade .....			113		Cascade .....			3	6
Choteau .....			*1		Choteau .....	73	33	19	58
Custer .....			3	\$104	Custer .....	35	51	*1	
Dawson .....			3	6	Dawson .....		4	*6	
Deer Lodge .....			78	2	Deer Lodge .....			*20	
Fergus .....			302	3	Fergus .....	36	24	338	1,075
Flathead .....			69	16	Flathead .....			33	86
Gallatin .....			157	16	Gallatin .....		4	33	86
Granite .....			45	69	Granite .....			35	70
Jefferson .....			*8	157	Jefferson .....			76	344
Lewis and Clarke ..			20	69	Lewis and Clarke ..	5	2	*11	
Madison .....			1	45	Madison .....			30	93
Meagher .....			*1	76	Meagher .....		10	80	210
Missoula .....			34	76	Missoula .....			47	94
Park .....			29	178	Park .....			*1	
Ravalli .....			1	51	Ravalli .....			21	45
Silver Bow .....			*2	135	Silver Bow .....			15	30
Sweet Grass .....			47	83	Sweet Grass .....			9	18
Teton .....			20	40	Teton .....			*2	
Valley .....			39	83	Valley .....		7	38	117
Yellowstone .....			*3	19	Yellowstone .....		15	121	297
Totals .....	3	105	*19	674	Totals .....	191	164	*38	\$4,494

\* Old law claims.

May				July					
Counties.	Wolf Pups	Wolves .....	Coyotes .....	Amount. ....	Counties.	Wolf Pups	Wolves .....	Coyotes .....	Amount. ....
Beaverhead .....		2	121	\$25	Beaverhead .....			38	\$76
Broadwater .....			17	34	Broadwater .....			15	30
Carbon .....		3	27	69	Carbon .....	2		13	30
		*1						*1	
Cascade .....	15	2	40	123	Cascade .....	25	5	77	232
Choteau .....	89	49	365	1,153	Choteau .....	25	19	467	1,079
Custer .....	26	11	110	327				*1	
Dawson .....	49	15	61	295	Custer .....	174	23	57	580
Deer Lodge .....			55	110	Dawson .....	34	55	105	553
Fergus .....	20	20	103	346	Deer Lodge .....			10	20
Flathead .....			3	6	Fergus .....	59	22	84	396
			*1		Flathead .....			7	14
Gallatin .....		2	20	53	Gallatin .....			10	20
Granite .....			5	10	Granite .....				
Jefferson .....			13	26	Jefferson .....			11	22
Lewis and Clarke .....		12	24	108	Lewis and Clarke .....		3	12	39
Madison .....			96	192	Madison .....			35	70
Meagher .....		1	19	43	Meagher .....		4	8	36
Missoula .....			4	8	Missoula .....			7	14
			*1					*1	
Park .....		1	36	80	Park .....		1	25	58
Ravalli .....			12	24	Ravalli .....			11	22
Silver Bow .....			7	14	Silver Bow .....				
Sweet Grass .....		2	46	102	Sweet Grass .....	1		9	20
Teton .....	85	9	329	872	Teton .....	14	4	246	540
Valley .....	43	10	223	582	Valley .....	8	5	423	887
Yellowstone .....	82	11	50	319	Yellowstone .....	32	14	75	284
		*1	*2		Totals .....	374	155	1,745	\$5,022
Totals .....	409	150	1,786	\$5,149					
June				August.					
Beaverhead .....		1	88	\$181	Beaverhead .....		1	31	\$67
Broadwater .....					Broadwater .....			*1	
Carbon .....			27	54	Carbon .....		3	2	19
Cascade .....	14	6	89	236	Cascade .....		3	18	51
Choteau .....	176	29	788	2,073	Choteau .....	3	13	284	639
Custer .....	145	31	139	722	Custer .....	128	63	161	893
Dawson .....		3	46	107	Dawson .....	4	1	41	95
Deer Lodge .....			16	32	Deer Lodge .....				
		*2			Fergus .....	32	9	39	187
Fergus .....	245	18	121	828	Flathead .....			4	8
Flathead .....			4	8	Gallatin .....			10	20
Gallatin .....			39	78	Granite .....			8	16
Granite .....			8	16	Jefferson .....			1	2
Jefferson .....			1	2	Lewis and Clarke .....	20	2	28	106
Lewis and Clarke .....	14	9	10	93	Madison .....			5	10
Madison .....			31	62	Meagher .....				
			*1		Missoula .....				
Meagher .....	5	3	32	92	Park .....			12	24
Missoula .....			5	10	Ravalli .....				
Park .....					Silver Bow .....			1	2
Ravalli .....			12	24	Sweet Grass .....			37	74
Silver Bow .....			7	14	Teton .....	11	5	69	185
					Valley .....		4	79	178
Sweet Grass .....	4	5	26	88	Yellowstone .....		1	32	69
			*2						
Teton .....	67	2	360	870					
Valley .....	40	10	336	802					
			*2					*1	
Yellowstone .....	69	22	135	524	Totals .....	198	105	874	\$2,672
			*3						
Totals .....	779	139	2,320	\$6,917					

\* Old law claims.

## SEVENTH ANNUAL REPORT OF BUREAU

September.					November.				
Counties.	Wolf Pups .	Wolves .....	Coyotes .....	Amount. ....	Counties.	Wolf Pups .	Wolves .....	Coyotes .....	Amount. ....
Beaverhead . . . . .			13	\$26	Beaverhead . . . . .		1	*2 79	\$169
Broadwater . . . . .					Broadwater . . . . .			13	26
Carbon . . . . .			3	6	Carbon . . . . .			*6 22	67
Cascade . . . . .			*2 13	35	Cascade . . . . .	3	8	19	84
Choteau . . . . .	5	16	60	210	Choteau . . . . .	2	15	97	273
Custer . . . . .	74	6	39	256	Custer . . . . .	31	77	343	1,133
Dawson . . . . .	5	59	89	483	Dawson . . . . .	1	85	133	693
Deer Lodge . . . . .			2	4	Deer Lodge . . . . .			*1 10	23
Fergus . . . . .	30	3	38	151	Fergus . . . . .		27	198	531
Flathead . . . . .					Flathead . . . . .			26	52
Gallatin . . . . .			1	2	Gallatin . . . . .			42	84
Granite . . . . .			1	2	Granite . . . . .			*3 9	27
Jefferson . . . . .			1	2	Jefferson . . . . .			20	40
Lewis and Clarke . . . . .	9	2	11	50	Lewis and Clarke . . . . .	3	15	45	45
Madison . . . . .			11	22	Madison . . . . .			35	70
Meagher . . . . .	5	6	12	64	Meagher . . . . .	9	40	125	125
Missoula . . . . .			1	2	Missoula . . . . .			5	10
Park . . . . .			1	2	Park . . . . .			16	32
Ravalli . . . . .			8	16	Ravalli . . . . .			15	30
Silver Bow . . . . .			1	8	Silver Bow . . . . .			8	16
Sweet Grass . . . . .		2	6	88	Sweet Grass . . . . .		5	51	127
Teton . . . . .	2		42	94	Teton . . . . .		1	14	33
Valley . . . . .			47	94	Valley . . . . .		3	57	129
Yellowstone . . . . .		3	21	57	Yellowstone . . . . .	5	13	218	511
Totals . . . . .	130	*2 98	*1 428	\$1,615	Totals . . . . .	42	248	*12 1,485	\$4,330
October.					December.				
Beaverhead . . . . .			43	\$86	Beaverhead . . . . .		2	109	\$228
Broadwater . . . . .			16	32	Broadwater . . . . .			18	36
Carbon . . . . .			*2 31	68	Carbon . . . . .		5	20	86
Cascade . . . . .			3	18	Cascade . . . . .		1	43	91
Choteau . . . . .			7	51	Choteau . . . . .		32	217	594
Custer . . . . .	94	30	136	610	Custer . . . . .	33	*15 49	381	1,118
Dawson . . . . .	8		51	142	Dawson . . . . .		4	84	188
Deer Lodge . . . . .			22	44	Deer Lodge . . . . .			11	22
Fergus . . . . .	6	34	128	450	Fergus . . . . .	4	47	135	513
Flathead . . . . .			6	12	Flathead . . . . .			33	66
Gallatin . . . . .			11	22	Gallatin . . . . .		1	73	151
Granite . . . . .			6	12	Granite . . . . .			17	34
Jefferson . . . . .			11	22	Jefferson . . . . .			24	48
Lewis and Clarke . . . . .	5	2	70	160	Lewis and Clarke . . . . .			25	96
Madison . . . . .			5	10	Madison . . . . .			25	50
Meagher . . . . .	2	2	*2 8	36	Meagher . . . . .	1	8	36	114
Missoula . . . . .			1	2	Missoula . . . . .			*3 91	191
Park . . . . .			3	6	Park . . . . .		2	41	* 92
Ravalli . . . . .			2	4	Ravalli . . . . .			*1 26	55
Silver Bow . . . . .				4	Silver Bow . . . . .		2	1	12
Sweet Grass . . . . .	4		11	42	Sweet Grass . . . . .		10	61	172
Teton . . . . .	2	5	108	243	Teton . . . . .		9	7	59
Valley . . . . .	4		88	196	Valley . . . . .		18	278	646
Yellowstone . . . . .		12	42	144	Yellowstone . . . . .		6	126	282
Totals . . . . .	109	111	*8 825	\$2,447	Totals . . . . .	38	*15 205	*5 1,891	4,943

\* Old law claims.



## TOTALS.

COUNTIES.	Wolf Pups	Wolves . .	Coyotes . .	Amount . . .	COUNTIES.	Wolf Pups...	Wolves.....	Coyotes.....	Amount.....
Beaverhead . . . . .	6	*30	656	1,432	Jefferson . . . . .	1		*1	292
Broadwater . . . . .	1	*2	103	217	Lewis and Clarke . .	54	93	270	1,113
Carbon . . . . .	2	*3	181	455	Madison . . . . .	1		*11	792
Cascade . . . . .	60	*1	346	1,082	Meagher . . . . .	12	67	*2	1,180
Choteau . . . . .	373	*6	2,394	6,517	Missoula . . . . .			*3	224
Custer . . . . .	718	*21	1,752	7,066	Park . . . . .	3		*5	402
Dawson . . . . .	93	*1	688	2,932	Ravalli . . . . .			118	251
Deer Lodge . . . . .		*9	205	413	Silver Bow . . . . .	1		49	103
Fergus . . . . .	428	*10	1,042	3,932	Sweet Grass . . . . .	5	43	*6	815
Flathead . . . . .	2	*1	139	318	Teton . . . . .	196	40	*2	3,314
Gallatin . . . . .	10	*10	292	637	Valley . . . . .	91	48	1,358	3,748
Granite . . . . .		*85		200	Yellowstone . . . . .	215	133	*3	2,953
					Totals . . . . .	2,247	*17 1,585	*130 13,764	\$40,388

\* Old law claims.



# The Sheep Industry.

Montana is Now the Largest Wool Producing State in the Union and Ranks Close to First in the Number of Sheep—Reports on the Industry.

The report of the Board of Sheep Commissioners for 1899, shows a total of 3,186,742 sheep in the state, valued at \$8,302,944, at an average assessment of \$2.62½ per head. The estimate of the National Association of Wool Manufacturers of Boston places the number of sheep in Montana at 3,218,802. By either estimate Montana is easily the leading sheep raising state of the Union. Estimating the wool product of the state at not far from twenty million pounds, and the average price at 16 cents per pound, would indicate something over \$3,000,000 received from that source. From the lamb crop and sales of mutton half as much more might be added, making the total yield something near \$4,500,000.

The commission gives the following as made from their returns for 1899:

COUNTY.	No. of Sheep on hand March 1, 1899 .....	No. Sheep brought in from other states since Mar. 1, 1899....	No. of Lambs dock- ed since Mar. 1, 1899	No. of Lambs and Sheep slaughtered, sold or shipped of state since Mar. 1, '99
Beaverhead .....	137,614	14,650	35,000	7,555
* Broadwater .....	34,304		10,795	1,800
Carbon .....	97,502	2,000	50,000	
Cascade .....	189,057		80,070	29,493
Choteau .....	527,763	11,400	175,000	79,640
Custer .....	374,010	5,450	144,060	9,570
Dawson .....	137,000	250	44,525	13,840
Deer Lodge .....	69,400	9,370	27,495	13,915
Fergus .....	536,534	12,250	164,435	56,270
* Flathead .....	186			
Gallatin .....	21,366	3,000	8,730	1,000
Granite .....	8,867		2,200	
* Jefferson .....	3,530		1,110	
* Lewis and Clarke ..	63,075		19,000	12,000
Madison .....	68,190		14,425	400
Meagher .....	274,800	**400	96,000	22,000
* Missoula.. .....	2,942			
Park .....	61,415	4,000	15,000	10,070
Ravalli .....	28,046	8,316	11,025	3,000
Silver Bow .....	3,585	2,100	1,216	13,181
* Sweet Grass .....	263,959	**500	68,700	40,000
*Teton .....	248,959	27,300	87,934	20,250
Valley .....	61,525	***30,000	23,496	4,000
Yellowstone .....	1269,522	86,600	67,536	60,000
Totals .....	3,483,151	217,586	1,147,742	397,914

\* Figures from returns to the State Board of Equalization.

\*\* Rams.

\*\*\*These sheep were driven into Valley County for shipment.

! This number includes about 50,000 sheep which are being fed for the mutton market, and also about 30,000 head on the Indian Reservation which are probably not listed elsewhere.

COUNTY.	No. lbs. of pelts sold since Mar. 1, 1899	Price received for pelts per pound	No. lbs. of wool sheared since March 1, 1899	Average price received for wool per pound	No. of Sheep destroyed by wolves and coyotes during year
Beaverhead	7,000	8	963,297	15	3,336
Broadwater	10,000	9½	156,445	16¾	600
Carbon	30,000	8½	650,000	16½	1,584
Cascade	22,150	8 to 10¼	1,273,529	14 to 20	492
Choteau	27,840	10¼	4,014,185	17½	.....
Custer	30,423	8	2,701,649	16	6,075
Dawson	.....	.....	1,027,410	17	.....
Deer Lodge	16,760	8½	445,300	15¼	480
Fergus	202,060	9 1-10	3,398,049	17 1-10	4,820
Flathead	.....	.....	.....	.....	.....
Gallatin	4,000	10	149,542	16	200
Granite	.....	.....	*55,000	.....	.....
Jefferson	.....	.....	**21,500	.....	.....
Lewis and Clarke	.....	.....	400,000	17 3-5	*250
Madison	4,020	7	280,382	15¼	895
Meagher	74,000	9	1,875,000	16.53	1,500
Missoula	.....	.....	.....	.....	.....
Park	10,000	8 to 11	360,000	16½	600
Ravalli	.....	.....	173,950	14½	215
Silver Bow	100,560	7	18,276	15	.....
Sweet Grass	32,500	9	1,715,733	16½	1,000
Teton	78,750	9½	1,658,300	17.07	1,550
Valley	9,907	8½	436,493	15½	559
Yellowstone	24,887	7 to 10	1,644,511	18½	1,660
Total	684,857	8¾	23,418,551	16¾	25,816
		Av.	Total	Av.	Total

\* One flock-master lost 175 head from blood-poisoning at shearing time.

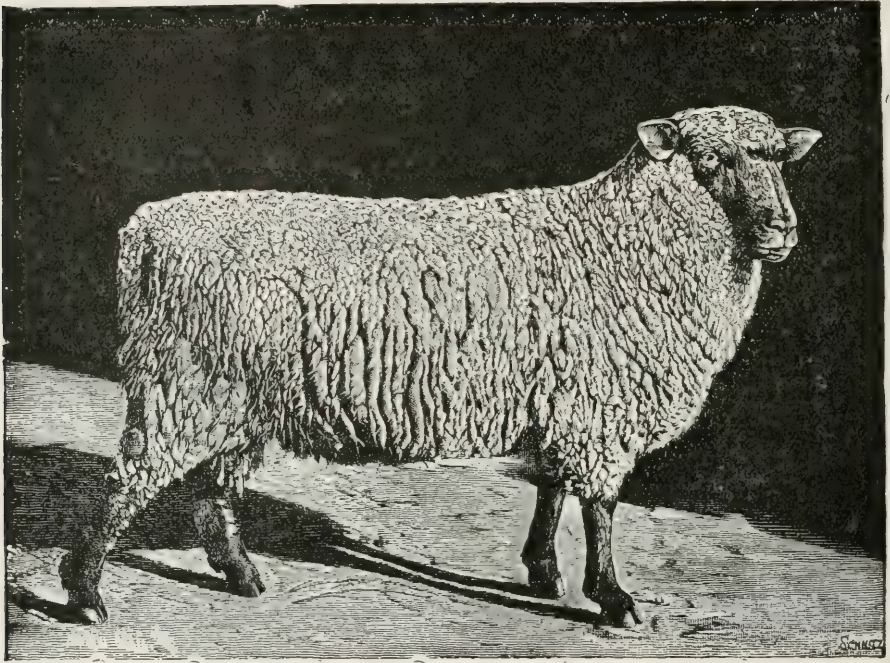
\*\* Estimated.

In a report made last year to the sheep commission, dealing especially with the condition and diseases that endanger the flocks of Montana, Dr. M. E. Knowles, the able state veterinarian, said: "It is the common belief among sheepmen that the disease known among sheep as foot-rot cannot become a part of the sheep diseases in this state. It is my belief that this is an erroneous idea, and that on general principles it is always a dangerous thing to juggle with fire. There is no doubt that some few cases of foot-rot have been imported into Montana during the past year or two, and that these sheep did not come in contact with others in a manner to spread the infection is probably not due to the surveillance of those that were interested. It is my belief that any contagious or infectious disease can exist in Montana, as well as it may elsewhere, and that the continued importation of sheep suffering from this disease will ultimately prove disastrous to your interests, there can be no question. The fact is that foot-rot has no geographical limit. It is said, however, to have only been known in Europe since the end of the last century, and to have been observed in Merinos imported into England from Spain. It was taken across the Pyrennes into France, and prevailed extensively therein during 1791. In Australia, it is exceedingly common. Randall says that it is common in America, but claims that it prevails mainly among the Merinos, and to a lesser extent with the coarser varieties.

"The disease is an inflammation and ulceration of the vascular structures



of the feet. It is manifested by a separation of the hoofs, lameness, and other diseased alterations, the feet emanating a strong odorous matter, which contains the principle of infection. It first affects one, two or more feet, but in its ordinary manifestation only one, passing slowly to the others. There will be observed early in its onset a lameness in the affected limb, ordinarily a front one; however, if examined at this period, perhaps no indication of the disease will be observed. In a few days the hoofs are found painful and hot on manipulation, and particularly so when the claws are separated, the skin about the superior part of the hoof and between the claws looks red, smooth pimples, pustules or vesicles, and a foul-smelling, cheese-like or oily matter covers the part. In a short time, if the skin is examined, between the exudation you will find a number of small ulcers which contrast with the white-



A MONTANA MONEY MAKER.

ness of the surrounding parts and gradually run together. The discharge is of a yellow color, and sticky, possessing much smell of ammonia. In two weeks to a month, separation of the upper part of the hoof takes place toward the heel, and a greasy, dark colored, foul, odorous fluid is secreted. The separation of the hoof going on from before to behind, the sides, however, remaining unaltered. In from 30 to 35 days the heel, in many cases, has nearly recovered, but between the toes the ulceration is extending, is deeper, and causes great pain. If loosened horn be removed, the living textures are seen to be swollen, of a bright red color, and covered with the same odorous matter already mentioned. The suffering is increased, and the animal dull and feverish, the lameness being so intense that the animal hesitates to put its foot on the ground, and if all feet be involved, it assumes a recumbent

position. Finally the sole becomes separated, and the entire horny case comes off, or is only attached by a few small parts of new horn. The hoof so shed may in time be reproduced, but only to be again shed, if the secreting tissues have not completely recovered. There is an exaggerated secretion of horny matter, and the foot becomes deformed, tuberous in shape, crooked and hard.

"It is not uncommon to see the disease in the region of the pastern, and if the malady continues, the puss becomes bloody and abundant, ultimately the tendons and ligaments become involved, and slough away in shreds, and the bone of the foot is involved in decay. The biflex canal is inflamed and



A SHIPPING CORRAL.

swollen, and suppurates, the puss reaching the joint, the capsule of which is destroyed, and the second bone of the foot may be implicated in the mass of disease. In such cases the pain is intense, appetite lost, and the animal falls into marasmus and dies.

"The loss from this disease will depend upon circumstances, but where it is carefully treated and handled, should not be large; but from an economical point of view, it is a grave disease from the loss it occasions in the condition of the band, and from its long duration therein. The virus of this disease will preserve its activity for a long period.

"When the disease appears in a band of sheep, the healthy should at once be separated from the diseased, and taken to a locality known not to be in-



fects. The healthy should not be permitted near the diseased or suspected, nor should they be allowed to use the same trails, drink out of the same watering place, or occupy the same pastures. The exposed should be examined several times a week, and any that show the slightest indication of the disease should be at once taken to the hospital band. Those positively known to have been exposed to the disease should be compelled to walk through a suitable trough, filled with some antiseptic solution, so that their



IN THE CORRAL.

fect and legs may be thoroughly disinfected. The measures to be observed are not those of cure, but of prevention, by the observance of strict quarantine regulations, and it is simply my desire, in mentioning this disease at this length, to impress upon your minds, and the minds of the Deputy Sheep Inspectors of the different counties, the necessity for looking carefully after other diseases than scab.

"I discovered a limited outbreak of sheep-pox, in a band of bucks, that were shipped from Ohio, and shortly after their arrival developed the disease, and during its prevalence he was unfortunate enough to lose about 10 per cent of the importation. He mixed these bucks with his native band of bucks, all of which became affected with the disease, but apparently they had it much milder than the imported bucks. This is a disease of grave importance to the sheep man, for should it become prevalent throughout our state, and the losses anything to compare with the Continental losses, it would make the sheep



industry a very unprofitable one. The losses in localities on the Continent have reached as high as 75 per cent, and rarely are less than 10 to 15 per cent. Friedberger and Frohner give the symptoms as follows:

"After a period of incubation of from four to seven days on the average (minimum 2 to 3 days) the disease is established, the animals are feverish, depressed and weak. They tremble, carry their heads low, cease to eat and to ruminate. The temperature is elevated, 41 to 42 C., and sometimes goes beyond these figures. The circulation and respiration are accelerated, the membrane of the eye red, and there is a discharge from the nose and eyes, but never abundant. From 24 to 28 hours later, the regions devoid of hair and those where the wool is not thick, about the head and the neighborhood of the eyes, nose and mouth and internal surface of the front and hind limbs, the chest and the belly, present red points, then soon afterward papules of the same color. The skin eruption is more rarely observed upon regions where the wool is abundant. Sometimes you will observe isolated pimples on the mucous membrane of the mouth and the throat. Ordinarily the skin eruptions produced by several successive developments do not present the same characteristics on the different regions. On the fourth or fifth days the papules bleach in their center, become vesicles, and are surrounded by a red circle or zone. The skin in the neighborhood seems to be hardened and swollen; this is particularly true about the head and surrounding the eyes, and after a few days the center of the vesicle becomes umbilicated, and their dimensions gradually augment. They contain a lymphoid liquid, limpid, and of a reddish yellow color, and 6 or 7 days after the eruption the vesicle reaches maturity. During the transformation you will observe the symptoms of a general febrile infection, accompanied by localized catarrhal troubles, the fever goes up; the membranes of the eyes, nose, throat and lungs are inflamed. The eyes and nose are the seat of mucopurulent secretions; the sick animals slobber; are seized with regurgitations, cough, the breathing becomes feeble, and sometimes a diarrhoea is noticed. The head becomes greatly swollen, and the skin perspiration has a foul odor. Finally the pustules dry up, the skin is retracted, and scabs, at first yellow, become a blackish brown and fall off, leaving small depressions or scars, which sometimes remain bare, but which afterwards are thinly covered with wool. Under ordinary conditions, the total operation of the disease is not more than three weeks. The evolution of sheep-pox is, however, not always regular. Even where it exists in the most fatal forms, it assumes, oftentimes, a very benign form, with rather an abortive course, the pustules existing in only a small number, and the fever but slightly marked."

"There are a number of forms of the disease and differences in their manifestation that would be uninteresting to you, but by the above I hope to give you an idea of the gravity of the disease and the importance of our watching that it does not gain a permanent hold in our state. It is said in the regular evolution of the disease, that the mortality ranges from 10 to 20 per cent. in the serious form; 50 per cent. and often greater in the confluent or hemorrhagic forms, or when the animals are old and feeble, or among sucking lambs the prognosis is always unfavorable. Inoculation against

this disease of necessity is practiced throughout the Continent, and the mortality of inoculation is said to be often nil; ordinarily, however, it is about 2 per cent.

The report of the Board of Sheep Commissioners for this year says that an effort has been made to get some light on and relief from the losses annually sustained by the sheep eating poisonous plants. In response to a request from the commission Professors Chestnut and Wilcox, expert botanists and chemists, were sent out by the department in May, and the returns show that the gentlemen accomplished valuable results. Of sixty plants examined, six were found to be poisonous, and a proved remedy was secured



BRINGING WOOL TO MARKET.

for three of these. The poisonous weeds eaten by sheep and for which a cure has been found, are the Larkspur, Lupine, Wild Parsnip and Death Camas, and for these 4 grains of permanganate of potash in 6 ounces of water is given. For cattle the dose is increased to 20 grains and a half pint of water. A supply of potash may be carried by the herders and administered when necessary.

During November of this year the state was visited by Dr. Rowe of Ogden, who came to confer with State Veterinarian Knowles relative to the appointment and location of two inspectors by the general government, for the state of Montana. Though all of the western wool-growing states have had these inspectors for the past couple of years, it had not been considered necessary for Montana, on account of the excellent health of its flocks, and as

these inspectors only inspect shipments out of the state, their services were better applied in the inspection of sheep coming into the state from other localities. The appointment of the inspectors, however, is now welcomed by the local sheep authorities, and in fact they were secured through their influence, as there will now be an authoritative head with which outside inspectors can keep in communication with shipments of sheep to this state, and through them allow the state authorities to watch importations the closer.

The latest estimates of the number of sheep in the country, made by the National Association of Wool Manufacturers, Montana is credited with 3,717,160 sheep. New Mexico has the largest number of sheep, and it has but 70,000 less than Montana. But while New Mexico is credited with 16,093,424 pounds of unwashed wool, Montana is credited with 26,000,000 pounds, making this by far the greatest wool producing state in the Union.

An item of especial interest to the wool-growers of the state is the proposed erection of a woolen mill at Big Timber. Ground has been broken for the buildings and it is expected that the industry will be in full operation the latter part of 1901. The success of this institution, which is inevitable under competent management, will be the cause of the early establishment of other like plants at favorable locations throughout the state.

The Sheep commission find that there is a great shortage of warehouse facilities at the wool-shipping points of the state. In several of the more prominent wool-growing counties of the state the sheep men have organized local wool-growers' associations, the object being to secure mutual protection.

The commissioner's report says that reports from the several counties show in detail that the health conditions are invariably good and that Montana stands foremost in this respect, and this fact the board ascribes not only the naturally healthful conditions of the state for his particular industry, but to the fact that the state has good laws regulating the importation of sheep into the state and to the efficient and energetic services of the State Veterinarian Dr. M. E. Knowles. The report shows that in each instance where disease appears among the flocks of the state that it was the result of imported infection, and it details the procedure for its prompt and complete eradication.

The basis of calculation showing the number of sheep in each state is taken from the annual report of the Department of Agriculture for the United States, and these are principally based on census figures and annually revised. The census reports in this feature, so far as they relate to Montana, are not to be obtained in time for this report. The average weight of the fleeces in each state and the shrinkage are the result of direct inquiry of the individual wool-growers, the dealers in wool and the manufacturers, and the state and county officials of the several states. The estimate of the clip of the United States for 1900 is as follows:



## SEVENTH ANNUAL REPORT OF BUREAU

States and Territories.	No. of Sheep, April 1, 1900 .....	Average weight of fleece, 1900 .....	Per cent. of Shrinkage, 1900 .....	Wool Washed and Unwashed .....	Wool Scoured .....
		Pounds.		Pounds	Pounds
Maine .....	247,168	6	40	1,483,008	889,805
New Hampshire .....	76,383	6.50	55	496,490	223,421
Vermont .....	164,858	6.75	56	1,112,792	489,629
Massachusetts .....	39,632	6	48	237,792	123,652
Rhode Island .....	10,364	5.50	42	57,002	33,062
Connecticut .....	31,204	5.50	41	171,622	101,257
New York .....	819,088	6	50	4,914,528	2,457,264
New Jersey .....	41,654	5	47	208,270	110,384
Pennsylvania .....	777,677	6	50	4,666,062	2,333,031
Delaware .....	12,239	5	46	61,195	33,046
Maryland .....	133,341	5	47	666,705	353,354
Virginia .....	358,072	5	42	1,790,360	1,038,409
North Carolina .....	223,497	5	43	1,117,485	636,967
South Carolina .....	56,258	5	44	281,290	157,523
Georgia .....	271,534	4	40	1,086,136	651,682
Florida .....	70,064	4	42	280,256	162,549
Alabama .....	160,632	4	40	642,528	395,517
Mississippi .....	204,745	4	41	818,980	483,199
Louisiana .....	105,621	4.50	50	475,295	237,648
Texas .....	2,317,636	6.25	70	14,485,225	4,345,575
Arkansas .....	103,836	4.25	40	441,303	264,782
Tennessee .....	225,875	4.25	40	1,002,469	601,481
West Virginia .....	401,632	5.50	47	2,208,976	1,170,757
Kentucky .....	514,643	5.25	38	2,701,876	1,675,163
Ohio .....	2,754,499	5.75	51	15,838,369	7,760,800
Michigan .....	1,340,456	6.70	52	8,981,055	4,310,906
Indiana .....	647,399	6.50	55	4,250,094	2,337,552
Illinois .....	616,037	6.50	50	4,004,241	2,002,121
Wisconsin .....	726,040	6.50	51	4,719,260	2,312,437
Minnesota .....	409,157	6.75	55	2,761,809	1,242,814
Iowa .....	586,644	6.50	55	3,813,186	1,715,934
Missouri .....	570,128	6	50	3,420,768	1,710,384
Kansas .....	270,716	8	67	2,165,728	714,690
Nebraska .....	315,937	7.75	65	2,448,462	856,962
South Dakota .....	372,717	6.50	60	2,422,661	969,064
North Dakota .....	362,512	6.50	60	2,356,328	924,531
MONTANA .....	3,717,160	7	63	26,020,120	9,627,444
Wyoming .....	2,780,546	7.75	67	21,549,231	7,111,246
Colorado .....	2,128,508	6.25	67	13,303,175	4,390,048
New Mexico .....	3,786,688	4.25	54	16,093,424	7,402,975
Arizona .....	1,003,942	7.50	72	7,529,565	2,108,278
Utah .....	2,261,917	6.25	65	14,136,981	4,947,943
Nevada .....	612,387	7.50	69	4,592,903	1,424,400
Idaho .....	2,576,240	7.50	68	19,321,800	6,182,976
Washington .....	759,399	8.50	73	6,454,892	1,742,821
Oregon .....	2,351,274	8	70	18,810,192	5,643,058
California .....	1,907,430	7	66	13,352,010	4,539,683
Oklahoma .....	32,432	6.75	65	218,916	86,621
Total .....	40,267,818	6.46	61.1	259,972,815	101,024,837
Pulled Wool .....				28,663,806	17,198,283
Total Product, 1900 .....				288,636,621	118,223,120

This total shows an increase over 1889 of 16,445,291 pounds, and as compared with 1897 of 50,088,882 pounds.

The net increase in the number of sheep, as compared with the total number in the country in 1896, is 3,803,413, or 10 per cent. The rate of increase each year is shown in the following table:

YEAR.	Number.	Annual Increase.	
		Number.	Per cent.
1896 .....	36,464,405	.....	.....
1897 .....	34,784,287	*1,680,118	*4.6
1898 ..... <sup>5</sup> / <sub>8</sub> .....	35,671,914	887,627	2.6
1899 .....	36,905,497	1,233,583	3.5
1900 .....	40,267,818	3,362,321	9.1

\* Decrease.

Practically all of this increase has taken place in the thirteen so-called territorial states of North Dakota, South Dakota, Montana, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada, Idaho, Washington, Oregon and California. The net increase in these thirteen states as compared with 1896 was 5,749,114, or 23.3 per cent., as shown by the following table:

YEAR.	Number.	Annual Increase.	
		Number.	Per cent.
1896 .....	18,871,606	.....	.....
1897 ..... <sup>5</sup> / <sub>8</sub> .....	19,009,185	137,579	.7
1898 .....	20,114,601	1,105,416	.5
1899 .....	21,359,228	1,244,627	5.8
1900 .....	24,620,720	3,261,492	13.2

The average weight of fleeces for the United States is 6.46 pounds. On the basis of the authority stated, with no allowance made for pulled wool, the product for 1900 is 248,452,437 pounds. The estimate of the American Wool Reporter brings the average fleece weight up from 6.04 in 1891 to 6.46 in 1900, and the increase of weight is credited by them to a change of breeds, and to the increasing preponderance of heavy shrinkage wools that are classed as territorial.

The estimates of wool production for thirteen years have been as follows, together with the scoured wool equivalents for the same period:

## FLEECE AND PULLED WOOL, WASHED AND IN THE GREASE.

Year.	Product. Pounds.	Decrease. Pounds.	Increase. Pounds.
1888 .....	301,876,121	293,829	.....
1889 .....	295,779,479	6,096,642	.....
1890 .....	309,474,856	.....	13,699,377
1891 .....	307,401,507	2,073,349	.....
1892 .....	333,018,405	.....	25,606,898
1893 .....	348,538,138	.....	15,519,733
1894 .....	325,210,712	23,327,426	.....
1895 .....	294,296,726	30,913,986	.....
1896 .....	272,474,708	21,822,018	.....
1897 .....	259,153,251	13,321,457	.....
1898 .....	266,720,684	.....	7,567,433
1899 .....	272,191,330	.....	5,470,646
1900 .....	288,636,621	.....	16,445,291

## SCoured WOOL.

Year.	Product. Pounds.	Decrease. Pounds.	Increase. Pounds.
1888 .....	136,591,955	3,964,730	.....
1889 .....	134,795,350	1,796,605	.....
1890 .....	139,628,220	.....	4,832,870
1891 .....	139,326,703	301,517	.....
1892 .....	145,300,318	.....	5,973,615
1893 .....	151,103,776	.....	5,803,458
1894 .....	140,292,268	10,811,508	.....
1895 .....	125,718,690	14,573,578	.....
1896 .....	115,284,579	10,434,111	.....
1897 .....	111,365,987	3,918,592	.....
1898 .....	111,661,581	.....	295,594
1899 .....	113,958,468	.....	2,296,887
1900 .....	118,223,120	.....	4,264,652

By means of the above figures, the Treasury Department's statistics of imports, and the Boston "Commercial Bulletin's" record of supplies on hand January 1st last, we are enabled to reach an approximate estimate of the available supplies of wool of all descriptions for the year 1900-01, in comparison with the similar statements for previous years:

	1897. Pounds	1898. Pounds	1899. Pounds	1900. Pounds
Wool clip... ..	259,153,251	266,720,684	272,191,339	288,636,621
Domestic wool on hand January 1.....	123,588,080	127,206,000	225,037,363	123,348,500
Foreign wool on hand January 1.....	26,844,000	49,581,000	66,131,327	25,265,000
In bond January 1 .....	*	24,862,514	57,924,367	44,958,660
Foreign wool imported January 1 to July 1	292,983,097	68,938,927	45,824,632	95,875,523
Total .....	702,568,428	537,309,125	667,109,028	578,084,304

\* Under the Wilson law there was no wool in bond.

Unaccounted for in the above statement are the supplies now in the warehouses of manufacturers, regarding which it is impossible to obtain any definite information. There is reason to believe that these stocks are lower than they have been at any time since 1897, and no longer any considerable factor in the situation. Nevertheless, the available supplies remaining at this date outside of the above are ample to meet the probable requirements of the mills, prior to the movement of the clip of 1901.

The following statement shows the quantity of wool retained for consumption in the United States for each year from 1890 to date. As the wool clip of the year reaches the market during the governmental fiscal year, the clip of any year is added to the imports of the fiscal year beginning July 1st preceding, so that the total consumption for a series of years is accurately indicated by this combination, however it may differ from the available supplies in any one year of the series.



Fiscal Year	Total Imports.	Exports, Domestic and Foreign.	NET IMPORTS.		Product'n	Retained for Consumption.	FINE WOOL.	
			Classes I. and II.	Class III.			Retained for Consumption.	Per cent. of Foreign.
	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	
1890-91 ..	129,303,648	2,930,045	36,783,501	89,882,024	309,474,856	435,848,459	345,966,435	10.63
1891-92 ..	148,670,652	3,210,019	53,350,167	92,312,992	307,101,507	452,562,140	360,249,218	14.81
1892-93 ..	172,433,838	4,310,495	46,189,082	122,026,119	333,018,405	501,141,748	379,115,629	12.18
1893-94 ..	55,152,585	6,497,654	7,167,380	42,007,798	348,538,138	397,193,069	355,185,271	2.02
1894-95 ..	206,081,890	6,622,190	98,388,318	105,402,507	325,210,712	524,722,428	419,319,921	23.46
1895-96 ..	230,911,473	12,972,217	126,966,355	97,918,882	294,296,726	512,235,982	414,317,100	30.64
1896-97 ..	350,852,026	8,700,598	235,282,735	112,141,457	272,474,708	614,627,365	502,485,908	46.84
1897-98 ..	132,795,302	2,625,971	47,480,033	82,810,437	259,153,251	389,322,582	306,512,146	15.50
1898-99 ..	76,736,209	14,095,335	3,349,870	60,947,423	266,720,684	329,361,558	268,387,135	1.25
1899-1900 ..	155,918,455	7,912,557	44,680,424	105,525,783	272,191,330	420,197,228	314,671,445	14.20
1900-01 ..	.....	.....	.....	.....	288,636,621	.....	.....	.....

The yearly exports of domestic wool have never exceeded 500,000 pounds, except as follows:

1893-4. ....	520,247 pounds	1896-7. ....	5,271,535 pounds
1894-5. ....	4,279,109 pounds	1898-9. ....	1,683,419 pounds
1895-6. ....	6,945,981 pounds	1899-1900. ....	2,200,309 pounds

The Bulletin of the National Association of Wool Manufacturers discusses the situation, and finds that the local market follows the foreign, and that there has been a very material falling off in the home consumption of woollen goods, and provides the local grower with some food for thought in the following article:

"The course of the wool market since the publication of the last clip estimate has been most erratic. Beginning in April, 1899, there was a rapid and continuous rise in prices for all grades of wool, which continued until December. Ohio XX, which sold in April for 26½ cents, was selling in December at 39 cents, and from that time a gradual decline set in, and the present prices are about on a parity with those of April, 1899. The domestic market has very closely followed that of London, in all these unexpected movements. At the January London sales, which opened on the 16th, there was a decline of 7 to 10 per cent., and the later sales of the year showed the market so heavy that the management of the Wool Exchange abandoned the fifth series of sales at the middle of September, substituting for that sale and the customary November sales a series of auctions, commencing October 9. The purpose of this unprecedented move was avowedly to check the phenomenal and unexplainable downward movement by feeding the trade with slow supplies. The result was not particularly flattering to the originators of this scheme for artificially strengthening the market. At the October sales, despite a large attendance, there was a lower basis for all descriptions of wool except coarse crossbreds. Merinos registered a further loss of from 10 to 15 per cent., indicating very plainly that notwithstanding the great shrinkage in the supply of these wools, about which so much has been written during the past two years, the markets have accommodated themselves to the change, and the demand has correspondingly fallen off. "The London Economist" of October 13 makes these interesting comments upon the situation at the opening of the October sales:

"The decision has apparently been arrived at by the banks and brokers

in London to allow the whole of the enormous quantity of wool now in their hands to be put up practically without reserve at the present series of auctions in Coleman street. This amounts to 366,000 bales, worth, even at today's low prices, probably over £10 per bale, and therefore requiring nearly four millions sterling to "lift" it. However, the policy of holding back 100,000 bales from the last series has had a most depressing effect upon the trade, and has completely defeated the object in view. Values have steadily declined, and for merino now in this market are fully 15 per cent. below the rates current in July. On the other hand, strong cross-breds, which had then almost reached the bottom, are today about on a par with the close of last sales. The drop in London, therefore, is not more than was expected, and the first three nights have shown that the trade is ready to buy freely upon the basis established so far, and it may be that the tone will improve as the sales progress. Low prices must prevail for a long while if confidence is to be restored and business to regain its normal volume; and the belief that at last this fact is realized in London has already done something to produce a more hopeful spirit here. A serious suspension in Philadelphia is testimony to the close and organic dependence of the American wool trade upon conditions here, in spite of a prohibitive tariff."



A SHEEP CAMP.

"Undoubtedly the state of the domestic wool market is a reflection of that abroad, and it is not necessary to look for local causes to explain it. Nevertheless it is true that certain conditions prevailing here are peculiar to the United States, and are seen in market conditions. Wool prices undoubtedly went higher in the fall of 1899 than there was any warrant for. The boom in the market for manufactured goods, as we now know, was overdone, and the excessive production of the season was in progress at a time when the prophets were actually predicting a scarcity in the supply of the raw material. In truth, there never was any approach to a scarcity, and at present, owing to

the curtailment of production which has followed the backward demand for goods, there is an actual redundancy of supplies; so that no return to the wool prices of 1899 can be looked for. The estimated per capita consumption of wool in 1890, was 9.07 greasy pounds against 8.52 in 1880. Assuming the clip of 1899 at 272,191,330 pounds, there was retained for consumption in the United States in 1900, after deducting all exports from the imports, a total of 420,197,228 pounds. The value of imported fabrics for the year was \$27,000,000, which adds 81,000,000 pounds of wool, a total of 501,000,000, which, with a total population of 76,295,220 since 1890 of 2.3 pounds per capita. There has been a steady increase in the population of the country—apparently about 21 per cent. since 1890—and an enormous falling off in the value of imported woollens. Yet the supplies of wool required to meet the demand for domestic goods are no greater than they were in 1890. This is assuming also that the abnormal wool imports of the free wool period have passed into consumption, and are no longer a factor in the supplies.

In the present general prosperity of the country the people are buying goods with quite as much freedom as was ever the case; it would seem to follow, therefore, that the use of cotton goods as a substitute for woollens has been increasing of late years. The advances which the cotton manufacture has made in the direction of imitating various makes of woollens have been very great in these ten years. So also has been the advance in the use of cotton in connection with wool, and this has been stimulated by the unwillingness of the buying public to pay prices for woollens which are commensurate with the increased cost of wool since the restoration of the duty on the latter. Even with cotton at 10 cents a pound, the difference between its cost and that of wool at 50 cents a scoured pound is so great in these days as to encourage the use of more or less cotton in fabrics which will not command prices which allow a fair return, provided the material used were all wool. A duty of 11 cents a pound on wool advances its cost so materially that it is now distinctly tending to reduce its consumption in the country. It has not been possible, notwithstanding the general advance in prices, to obtain the values for woollen goods which ruled prior to the tariff revision of 1894. Yet the wool and the labor are costing just about as much as before.

RECEIPTS OF WOOL IN BOSTON IN BALES, 1895-1900.  
(Boston Chamber of Commerce Reports.)

	1895		1896		1897	
	Domes- tic	Foreign	Domestic	Foreign	D'mestic	Foreign
January ... ..	27,805	9,032	28,027	23,877	25,476	18,931
February .. .. .	19,466	26,634	18,514	33,038	29,808	49,676
March .....	23,320	13,894	19,755	34,302	26,300	80,320
April .....	26,732	47,526	20,139	12,389	28,109	164,364
May .....	46,856	24,930	43,183	19,135	39,509	66,646
June .....	81,827	27,088	59,341	5,781	47,002	52,517
July .....	139,580	39,080	69,603	5,214	100,277	41,858
August .....	81,434	65,581	52,347	3,654	92,521	70
September .....	33,732	16,226	21,584	3,069	63,764	2,289
October .....	33,782	21,490	38,855	8,785	46,699	9,071
November .....	32,894	15,981	33,586	14,648	32,347	8,329
December .....	30,310	18,168	37,120	47,587	19,182	17,133
Total .....	577,737	325,900	442,054	211,479	550,994	511,254



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## RECEIPTS OF WOOL—Continued.

	1898		1899		1900	
	Domes- tic	Foreign	Domestic	Foreign	D'mestic	Foreign
January .....	18,640	11,803	21,194	6,794	29,029	10,466
February .....	20,584	21,973	25,605	11,494	22,954	14,337
March .....	17,968	19,057	27,446	5,709	21,566	22,084
April .....	13,573	22,235	23,344	8,925	15,973	32,853
May .....	14,008	6,934	52,899	6,064	22,010	15,027
June.....	38,308	14,000	105,888	7,961	39,055	8,322
July .....	67,629	1,612	137,673	3,552	61,837	7,891
August ..	53,524	3,596	109,002	6,791	69,721	5,450
September .....	27,691	1,398	46,246	9,699	35,482	6,707
October .....	15,913	4,973	49,731	10,955	.....	.....
November .....	10,660	4,059	51,455	11,799	.....	.....
December .....	23,723	6,596	50,720	14,605	.....	.....
Total.....	322,221	117,236	701,203	104,348	317,627 9 mos.	113,136 9 mos.

MONTHLY SALES OF WOOL IN BOSTON FROM JAN. 1, 1892, TO OCT. 1, 1900.  
(Report by T. C. O'Brien, Commercial Editor, Boston Journal.)

	1892. Pounds	1893. Pounds	1894. Pounds	1895. Pounds	1896. Pounds
January.....	13,575,000	16,675,000	7,761,000	13,886,000	20,094,000
February .....	12,450,000	16,633,000	11,204,000	14,745,000	13,090,800
March .....	12,450,000	10,500,000	14,402,000	15,705,000	6,288,000
April .....	11,869,000	13,205,000	10,111,000	11,844,000	8,502,000
May .....	10,590,000	7,412,000	7,661,000	11,432,000	7,758,000
June .....	10,749,000	5,090,000	9,797,000	29,358,000	11,301,000
July .....	19,875,000	8,879,000	18,575,000	32,562,000	4,178,000
August .....	16,342,000	4,083,000	22,446,000	20,627,000	7,153,000
September .....	16,200,000	14,965,000	20,430,000	19,970,000	19,071,000
October.....	18,138,000	8,897,000	11,814,000	32,803,000	25,774,000
November .....	14,950,000	13,740,000	12,115,000	15,267,000	19,472,000
December .....	16,120,000	9,993,000	13,490,800	13,975,000	10,692,000
	173,308,000	130,072,000	159,814,000	232,174,000	153,378,000

## MONTHLY SALES OF WOOL IN BOSTON—Continued.

	1897.	1898.	1899.	1900.	
	Pounds	Pounds	Pounds	Domestic Pounds	Foreign Pounds
January .....	35,253,000	28,310,000	12,581,000	13,147,000	1,531,500
February .....	27,757,000	13,246,000	16,140,000	10,870,500	2,949,000
March .....	34,542,000	5,925,000	11,322,200	12,372,500	1,887,000
April .....	31,119,000	4,860,000	27,625,800	8,074,000	1,335,000
May .....	21,568,000	7,212,000	28,774,500	7,702,000	1,248,000
June .....	26,842,000	6,502,000	22,063,000	5,373,600	1,576,000
July .....	44,669,000	13,639,000	43,847,000	8,098,600	827,000
August .....	39,318,000	11,271,000	20,715,000	14,859,500	1,202,000
September .....	40,952,000	7,889,000	33,160,000	6,119,200	266,000
October .....	36,196,000	12,600,000	51,481,300	.....	.....
November .....	21,770,000	23,799,500	54,125,000	.....	.....
December .....	20,110,000	26,577,000	18,469,500	.....	.....
	380,096,000	161,830,500	345,304,300	86,616,900 9 mos.	12,821,500 9 mos.



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RECEIPTS OF WOOL—Continued.

	1898		1899		1900	
	Domes- tic	Foreign	Domestic	Foreign	D'mestic	Foreign
January .....	18,640	11,803	21,194	6,794	29,029	10,465
February .....	20,584	21,973	25,605	11,494	22,954	14,337
March .....	17,968	19,057	27,446	5,709	21,566	22,084
April .....	13,573	22,235	23,344	8,925	15,973	32,853
May .....	14,008	6,934	52,899	6,064	22,010	15,027
June.....	38,308	14,000	105,888	7,961	39,055	8,322
July .....	67,629	1,612	137,673	3,552	61,837	7,891
August ..	53,524	3,596	109,002	6,791	69,721	5,450
September .....	27,691	1,398	46,246	9,699	35,482	6,707
October .....	15,913	4,973	49,731	10,955	.....	.....
November .....	10,660	4,059	51,455	11,799	.....	.....
December .....	23,723	5,596	50,720	14,605	.....	.....
Total.....	322,221	117,236	701,203	104,348	317,627 9 mos.	113,136 9 mos.

MONTHLY SALES OF WOOL IN BOSTON FROM JAN. 1, 1892, TO OCT. 1, 1900.  
(Report by T. C. O'Brien, Commercial Editor, Boston Journal.)

	1892. Pounds	1893. Pounds	1894. Pounds	1895. Pounds	1896. Pounds
January.....	13,575,000	16,675,000	7,761,000	13,886,000	20,094,000
February .....	12,450,000	16,633,000	11,204,000	14,745,000	13,090,800
March .....	12,450,000	10,500,000	14,402,000	15,705,000	6,288,000
April .....	11,869,000	13,205,000	10,111,000	11,844,000	8,502,000
May .....	10,590,000	7,412,000	7,661,000	11,432,000	7,758,000
June .....	10,749,000	5,090,000	9,797,000	29,358,000	11,301,000
July .....	19,875,000	8,879,000	18,575,000	32,562,000	4,178,000
August .....	16,342,000	4,083,000	22,446,000	20,627,000	7,153,000
September .....	16,200,000	14,965,000	20,430,000	19,970,000	19,071,000
October.....	18,138,000	8,897,000	11,814,000	32,803,000	25,774,000
November .....	14,950,000	13,740,000	12,115,000	15,267,000	19,472,000
December .....	16,120,000	9,993,000	13,490,800	13,975,000	10,692,000
	173,308,000	130,072,000	159,814,000	232,174,000	153,378,000

MONTHLY SALES OF WOOL IN BOSTON—Continued.

	1897.	1898.	1899.	1900.	
	Pounds	Pounds	Pounds	Domestic Pounds	Foreign Pounds
January .....	35,253,000	28,310,000	12,581,000	13,147,000	1,531,500
February .....	27,757,000	13,246,000	16,140,000	10,870,500	2,949,000
March .....	34,542,000	5,925,000	11,322,200	12,372,500	1,887,000
April .....	31,119,000	4,860,000	27,625,800	8,074,000	1,335,000
May ...	21,568,000	7,212,000	28,774,500	7,702,000	1,248,000
June ....	26,842,000	6,502,000	22,063,000	5,373,600	1,576,000
July .....	44,669,000	13,639,000	43,847,000	8,098,600	827,000
August .....	39,318,000	11,271,000	20,715,000	14,859,500	1,202,000
September .....	40,952,000	7,889,000	23,160,000	6,119,200	266,000
October .....	36,196,000	12,600,000	51,481,300	.....	.....
November .....	21,770,000	23,799,500	54,125,000	.....	.....
December .....	20,110,000	26,577,000	18,469,500	.....	.....
	390,096,000	161,830,500	345,304,300	86,616,900 9 mos.	12,821,500 9 mos.







WORLD'S WOOL PRODUCTION IN 1900.  
ESTIMATED FROM LATEST RETURNS, BY THE NATIONAL ASSOCIATION  
OF WOOL MANUFACTURERS.

Of the world's wool production 2,092,389,013 pounds are of classes one and two, washed and unwashed, and 592,716,000 pounds of class three of the American tariff classification.

Europe:	Pounds.	Pounds.
* Great Britain and Ireland .....	*140,232,392	
Russia, including Poland .....	361,100,000	
France .....	103,610,000	
Spain .....	102,600,000	
Germany .....	49,590,000	
Austria-Hungary .....	64,300,000	
Italy .....	**21,451,000	
Portugal... ..	13,410,000	
Sweden and Norway .....	8,200,000	
Turkey and Balkan Peninsula .....	67,500,000	
All other Europe .....	14,000,000	
		945,993,392
North America:		
United States.....	***288,636,621	
British Provinces .....	12,000,000	
Mexico .....	5,000,000	
		305,636,621
South America:		
Argentine Republic .....	370,000,000	
Chile .....	7,500,000	
Brazil .....	1,500,000	
Uruguay .....	96,000,000	
Venezuela .....	15,000,000	
All other .....	20,000,000	
		510,000,000
Central America and West Indies .....		5,000,000
Asia:		
Russia .....	60,000,000	
British India .....	85,000,000	
Asiatic Turkey .....	33,000,000	
Central Asia .....	46,000,000	
China .....	35,000,000	
All other .....	15,000,000	
		274,000,000
Australasia .....		510,000,000
Africa:		
Algeria and Tunis.....	30,425,000	
Egypt .....	3,000,000	
Cape Colony, Natal and Orange Free State .....	100,000,000	
All other .....	1,000,000	
		134,425,000
Oceanica .....		50,000
Total .....		2,685,105,013

\* Great Britain and Ireland, product of 1899. \*\* Fleece Washed. \*\*\* Washed and unwashed.

The National Association of Wool Manufacturers finds that about one-half of the sheep of the country are now of English breeds or grades in which that blood predominates. Discussing the profitableness of mutton raising, the same authority says that those who have watched the great western markets have seen abundant evidence of higher appreciation of mutton than formerly, in active markets and higher prices. During the present season the average price of mutton in the Chicago market has ranged higher than that of beef, and at times the quotations for prime native wethers have been higher than for extra prime steers.

A noticeable feature of the mutton trade has been the demand for Colorado lambs. It was discovered that the Mexican lambs improved by cross-breeding, and fed a few months in winter with corn and alfalfa made meat of



high quality, which has become so popular that it is sought as a delicacy by managers of hotels of the seaboard cities from Boston and New York to Florida. These lambs sell in Chicago for \$7.50 to \$7.75 per hundred pounds. The business of feeding has been very profitable, and much money has been made in it. Some feeders have had thousands in their yards at a time, and some young men with small means and a little credit with local banks have made handsome profits. Clay, Robinson & Co., of Chicago, estimate the annual output of these lambs fed in Colorado at 350,000, with as many more similar feeding at other points. At \$6 per head, this would make a total of \$4,200,000 for this peculiar development of mutton production. The preferable live weight of these lambs is about 80 pounds, which is not far from the average.

The mutton breeds are very prolific, and the number of lambs with proper care is 100 per cent. of the number of ewes. Always a large proportion of the lamb crop of the farming districts, and not a few in ranch districts, are every season consumed locally as spring lambs, or appear in markets through the year, being usually known as lamb until a year old.

An indication of the rapid increase and large volume of marketing sheep is found in the records of receipts of four principal western markets, at different periods, as follows:

NUMBER OF MUTTON SHEEP RECEIVED AT PRINCIPAL WESTERN MARKETS AT DIFFERENT PERIODS.

	1870.	1880.	1890.	1899.
Chicago .....	349,853	335,810	2,182,667	3,682,832
Kansas City .....		50,611	535,869	953,241
Omaha .....			156,186	1,086,319
St. Louis .....	49,477	205,969	358,496	432,566

Here is an increase in thirty years from less than 500,000 to more than 6,000,000, and over 5,000,000 were slaughtered in these four cities. Other cities in the west slaughter considerable numbers, the great seaboard cities kill large numbers, besides consuming refrigerated carcasses from the west, and every town and village in the country has a market for live sheep and lambs. On nearly a million farms and ranches where sheep are grown, mutton is a prominent resource for meat consumption.

A similar change in distribution of mutton sheep has been observed in all wool-growing countries. A strong inducement has been found in the demand for mutton in Great Britain, which has given rise to the frozen meat trade of New Zealand and Argentina. Heavy importations of English mutton sheep have been in progress in those countries for years, until nearly half their flocks are cross-bred. Messrs. Helmuth, Schwartze & Co., of London, in reporting the relative proportion of cross-bred and merino wools, show an increase of the former of from 17.7 per cent. in 1888 to 44.6 per cent. in 1898 in the colonial and Plata river wools, as given in the following statement in millions of pounds of clean wool:

## RELATIVE INCREASE AND DECREASE OF CROSS-BRED AND MERINO WOOL.

YEAR.	CROSS-BRED.		MERINO.		Total Millions of Pounds.
	Millions of Pounds	Per Cent.	Millions of Pounds.	Per Cent.	
1888 .....	70	17.7	325	82.3	395
1892 .....	98	19.6	402	80.4	500
1897 .....	232	39.6	354	60.4	586
1898 .....	248	44.6	308	55.4	556

The result of so radical a change throughout the world has caused the relative appreciation of merino wool. There is in all markets a comparative scarcity of fine wool, and a demand for increase to which breeders are now responding.

Under present conditions, however, the production of mutton in this country will continue to be profitable, and should be, in some of its branches, one of the important rural industries.

The value of the net importations of manufactures of wool from 1830 by decades, to 1900, has been as follows:

Ten years ended with—	Aggregate.	Annual average	Av. value per capita
1830 .....	\$82,900,615	\$8,290,062	\$0.75
1840 .....	139,507,716	13,950,772	.94
1850 .....	130,053,518	13,005,352	.65
1860 .....	313,332,730	31,333,273	1.16
1870 .....	330,465,214	33,046,521	.94
1880 .....	395,376,936	39,537,694	.90
1890 .....	433,459,813	43,345,981	.77
1900 .....	320,134,071	32,013,407	.46

## SEVENTH ANNUAL REPORT OF BUREAU

QUARTERLY REPORT OF THE BOSTON WOOL MARKET  
FOR JULY, AUGUST AND SEPTEMBER, 1900.  
DOMESTIC WOOLS.

	1900.			1899.
	July.	August.	September.	September.
<b>OHIO, PENNSYLVANIA AND WEST VIRGINIA.</b>				
(Washed.)				
XX and above .....	28 @ 30	28 @ 30	28 @ 29	31 @ 32
X .....	26 @ 28	26 @ 27½	25 @ 26½	29 @ 30
Unmerchtable X and above in grade	21 @ 22	20 @ 22	20 @ 21	23 @ 24
Half blood .....	27 @ 30	26 @ 28	26 @ 27	30 @ 32
No. 1 Combing and Clothing mixed....	30 @ 32	30 @ 31	29 @ 30	33 @ 34
No. 2 Combing and Clothing mixed....	30 @ 32	30 @ 31	29 @ 30	33 @ 34
Coarse and common .....	28 @ 29	27 @ 28	26 @ 28	27 @ 28
Fine Delaine .....	30 @ 32	30	29 @ 30	33 @ 35
(Unwashed)				
Fine, X and above in grade .....	19 @ 21	19 @ 20	18 @ 19	22 @ 23
Half blood .....	22 @ 23	22 @ 22½	21 @ 22	23 @ 24
No. 1 Combing and Clothing mixed....	24 @ 25	24 @ 24½	24	24 @ 25
No. 2 Combing and Clothing mixed....	24 @ 25	24 @ 24½	24	24 @ 25
Coarse and common .....	21 @ 22	20 @ 22	20 @ 21	19 @ 21
Fine Delaine .....	22 @ 23	21 @ 22	20 @ 21	23 @ 25
<b>MICHIGAN, WISCONSIN, NEW YORK, ETC.</b>				
(Washed.)				
X and above .....	22½ @ 23	22½ @ 23	22½ @ 23	25 @ 26
Unmerchtable X and above in grade	18 @ 20	18 @ 20	18 @ 20	20 @ 22
Half blood .....	24 @ 25	24 @ 25	24 @ 25	27 @ 28
No. 1 Combing and Clothing mixed....	28 @ 30	28 @ 30	28 @ 29	30 @ 32
No. 2 Combing and Clothing mixed....	28 @ 30	28 @ 30	28 @ 29	30 @ 32
Coarse and common .....	26 @ 28	25 @ 28	25 @ 27	27 @ 28
Fine Delaine .....	26 @ 27½	26 @ 27	26 @ 27	30 @ 31
(Unwashed)				
Fine, X and above in grade .....	17 @ 18	17 @ 17½	16 @ 17	19 @ 21
Half blood .....	20 @ 21	20 @ 21	20 @ 21	20 @ 22
No. 1 Combing and Clothing mixed....	23 @ 24	22 @ 23	22 @ 23	22 @ 23
No. 2 Combing and Clothing mixed....	23 @ 24	22 @ 23	22 @ 23	22 @ 23
Coarse and common .....	18 @ 20	18 @ 20	18 @ 20	19 @ 20
Fine Delaine .....	20 @ 21	19 @ 20	18 @ 19	22 @ 23
<b>KENTUCKY AND INDIANA.</b>				
(Unwashed)				
Combing (¾ blood) .....	25 @ 26	25 @ 25½	25	22½ @ 23
Combing (¼ blood) .....	25 @ 26	25 @ 25½	25	22 @ 22½
Braid .....	20 @ 22	20 @ 21	20 @ 21	19 @ 20
Clothing (¾ blood) .....	24 @ 25	23 @ 25	23	22 @ 24
Clothing (¼ blood) .....	24 @ 25	23 @ 25	23	22 @ 24
Clothing coarse .....	20 @ 21	19 @ 20	18 @ 20	19 @ 20
<b>MISSOURI, IOWA AND ILLINOIS.</b>				
(Unwashed.)				
Combing (¾ blood) .....	23 @ 24	22½ @ 24	22 @ 23	22 @ 22½
Combing (¼ blood) .....	23 @ 24	22½ @ 24	22 @ 23	22 @ 22½
Braid .....	19 @ 20	19 @ 20	19	19 @ 21
Clothing (¾ blood) .....	22½ @ 23	22 @ 23	22 @ 22½	21 @ 22
Clothing (¼ blood) .....	22½ @ 23	22 @ 23	22 @ 22½	21 @ 22
Clothing coarse .....	18 @ 20	18 @ 20	18 @ 19	18 @ 20
<b>TEXAS.</b>				
(Scoured basis.)				
Spring, fine, 12 months .....	50 @ 52	50 @ 52	50 @ 51	48 @ 50
Spring, fine, 6 to 8 months .....	43 @ 44	43 @ 44	43 @ 44	45 @ 46
Spring, medium, 12 months .....	46 @ 48	46 @ 48	45 @ 48	45 @ 48
Spring, medium, 6 to 8 months .....	42 @ 45	42 @ 45	42 @ 44	42 @ 45
Fall, fine .....	42 @ 43	41 @ 43	41 @ 43	42 @ 46
Fall, medium .....	40	40	38 @ 40	40 @ 43
<b>CALIFORNIA.</b>				
(Scoured basis.)				
Spring, Northern, free, 12 months .....	50 @ 52	50 @ 51	48 @ 50	48 @ 50
Spring, Northern, free, 6 to 8 months..	42 @ 44	42 @ 44	42 @ 43	43 @ 46
Southern, 12 months .....	48 @ 50	47 @ 50	46 @ 48	46 @ 48
Southern, 6 to 8 months .....	40 @ 42	40 @ 41	40 @ 41	43 @ 45
Fall, free .....	43 @ 45	43 @ 45	42 @ 44	40 @ 44
Fall, defective .....	30 @ 40	30 @ 40	30 @ 40	25 @ 40



	1900.			1899.
	July.	August.	September.	September.
<b>OREGON.</b>				
(Scoured basis.)				
Eastern, No. 1.....	48 @ 50	47 @ 50	47 @ 50	48 @ 50
Eastern, No. 2.....	45 @ 46	44 @ 45	43 @ 45	46 @ 48
Valley, No. 1.....	48 @ 50	46 @ 48	45 @ 48	48 @ 50
Valley, No. 2.....	45 @ 46	44 @ 45	43 @ 45	46 @ 48
<b>MONTANA.</b>				
(Scoured basis.)				
Fine .....	52 @ 53	50 @ 52	48 @ 50	48 @ 52
Fine medium .....	50 @ 52	48 @ 50	47½ @ 48	48 @ 50
Medium .....	45 @ 47	43 @ 45	43 @ 44	46 @ 48
Selected Delaine, staple .....	53 @ 55	52 @ 53	50 @ 52½	53 @ 58
<b>WYOMING AND UTAH.</b>				
(Scoured basis.)				
Fine .....	50 @ 52	50 @ 52	48 @ 50	48 @ 52
Fine medium .....	50 @ 52	48 @ 50	47½ @ 48	48 @ 50
Medium .....	46 @ 47	45 @ 46	44 @ 45	46 @ 48
Selected Delaine, staple .....	53 @ 55	52 @ 53	50 @ 52½	53 @ 58
<b>COLORADO AND NEW MEXICO.</b>				
(Unwashed.)				
Improved .....	15 @ 16	14 @ 15	14 @ 15	15 @ 20
Coarse and Carpet .....	13 @ 15	12½ @ 15	12½ @ 15	13 @ 18
<b>GEORGIA AND SOUTHERN.</b>				
(Unwashed).....	20 @ 22	20 @ 22	20 @ 22	22 @ 23

## FOREIGN WOOLS.

<b>Australian Combing:</b>				
Choice .....	42 @ 43	41 @ 42	40 @ 41	41 @ 42
Good .....	40 @ 41	39 @ 40	38 @ 39	38 @ 40
Average .....	38 @ 40	37 @ 39	36 @ 38	32 @ 35
<b>Australian Clothing:</b>				
Choice .....	42 @ 43	41 @ 42	40 @ 41	39 @ 41
Good .....	40 @ 41	39 @ 40	38 @ 39	35 @ 36
Average .....	37 @ 39	36 @ 38	35 @ 37	31 @ 32
<b>Sydney and Queensland:</b>				
Good Clothing .....	35 @ 37	34 @ 36	33 @ 35	32 @ 34
Good Combing .....	36 @ 38	35 @ 37	34 @ 36	33 @ 36
<b>Australian Crossbred:</b>				
Choice .....	32 @ 33	31 @ 32	31 @ 32	30 @ 32
Average .....	30 @ 32	29 @ 31	29 @ 30	26 @ 28
<b>Australian Lambs:</b>				
Choice .....	42 @ 44	41 @ 43	40 @ 42	41 @ 42
Good .....	36 @ 38	35 @ 37	34 @ 36	33 @ 34
Good Defective .....	28 @ 30	27 @ 29	26 @ 28	28 @ 30
<b>Cape of Good Hope:</b>				
Choice .....	26 @ 28	26 @ 28	26 @ 28	26 @ 28
Average .....	21 @ 23	20 @ 22	20 @ 22	20 @ 22
<b>Montevideo:</b>				
Choice .....	29 @ 31	28 @ 30	27 @ 29	27 @ 28
Average .....	26 @ 28	25 @ 27	25 @ 26	24 @ 26
Crossbred Choice .....	27 @ 28	27 @ 28	27 @ 28	26 @ 28
<b>Australian and Montevideo Pulled:</b>				
Combing .....	44 @ 45	44 @ 45	43 @ 44	46 @ 48
Clothing .....	41 @ 42	41 @ 42	40 @ 42	44 @ 46
<b>English Wools:</b>				
Sussex Fleece .....	31 @ 32	31 @ 32	31 @ 32	33 @ 35
Shropshire Hogs .....	30 @ 31	30 @ 31	30 @ 31	32 @ 33
Yorkshire Hogs .....	30 @ 31	30 @ 31	29 @ 30	31 @ 32
Irish Selected Fleece .....	31 @ 32	30 @ 31	29 @ 30	31 @ 32
<b>Carpet Wools:</b>				
Scotch Highland, White .....	14 @ 15	14 @ 15	13 @ 14	14 @ 16
East India, 1st White Joria .....	29 @ 30	29 @ 30	29 @ 30	23 @ 25
East India, White Kandahar .....	20 @ 21	20 @ 21	20 @ 21	19 @ 20
Donskol, Washed, White .....	16 @ 18	16 @ 18	16 @ 18	20 @ 21
Aleppo, White .....	17 @ 18	17 @ 18	17 @ 18	17 @ 19
Bagdad, White .....	20 @ 21	20 @ 21	20 @ 21	20 @ 21
Bagdad, Black and Brown .....	17 @ 18	17 @ 18	17 @ 18	18 @ 19
China Ball, White .....	15 @ 18	15 @ 18	15 @ 18	13 @ 15
China Ball, No. 1 Open .....	12 @ 14	12 @ 14	12 @ 14	11 @ 12
China, Ball, No. 2, Open .....	9 @ 10	9 @ 10	10 @ 11	9 @ 10

## Sheep Feeding in Montana.

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While nearly four million sheep are to be found in Montana, which is generally conceded to be one of the leading sheep states of the Union, only a small percentage of those exported are fattened within the state. Hitherto wool-production has been the primary object, while the male increase has been sold in an unfinished condition to eastern feeders. It is not long since the larger portion of the finished mutton of the country was produced east of the Mississippi river, but the feeding industry is rapidly extending westward. Colorado and Wyoming have already developed the industry to a great degree. This they have been enabled to do because of the suitability of their conditions for alfalfa production. Until quite recently no attempt has been made to feed in Montana except in so far as it was necessary during stormy periods of the winter while the ranges were covered deep with snow.

But Montana is destined to become a great feeding state also. Ere long she will be able to fatten all the surplus stock produced within her borders. Her many fertile irrigated valleys are all capable of producing some one or more of the legumes, such as red clover, alfalfa and alsike, while native hays can also be secured for the maintenance of the large breeding flocks. The Yellowstone valley has already become famous for its alfalfa production, the Gallatin for its clover, alfalfa and alsike, the Bitter Root and Flathead for red clover, and Milk River for alfalfa. It is in these irrigated regions where the legumes can be grown so abundantly that sheep-feeding is sure to become an important industry. Lambs and wethers have been fattened in the Yellowstone valley on alfalfa with marked success for several years. The work has grown until at the present time about 150,000 sheep and lambs are on feed.

Prof. A. S. Shaw, agriculturist, of the Bozeman Agricultural College, writes that during the three past years the Montana Experiment Station has been endeavoring to stimulate this industry in the Gallatin valley as well. Three years ago one or two hundred were put on feed, followed the next season by double the number, while about 4,000 are on feed at the present time. The conditions which render the Gallatin valley so suitable for purposes of sheep-feeding are found in its ability to produce clover abundantly. In the greater portion of its area clover flourishes best, and fits nicely into the grain-growers' rotation. At the same time in those portions where clover does not succeed so well, on the lighter or more gravelly lands, alfalfa can be produced instead.

The legumes, alfalfa, red clover and alsike, are foods of the most suitable character for mutton-production, containing as they do large quantities of protein compounds, which gives a meat of better quality than that produced from the more carbonaceous foods upon which the eastern feeder is forced to rely.

As regards the feeding value of these three foods, alfalfa, red clover and alsike, there is comparatively little difference. Experiments conducted by the Experiment Station during '98 and '99, in which the three were used, gave results slightly in favor of alsike, with clover and alfalfa a close second and third. Because of the fact that the two latter are larger yielders per acre, this difference in actual value is scarcely appreciable. So that what may be said with regard to any one of these will apply in much the same way to the others.

Feeding tests during '99 and 1900 showed conclusively that with clover possessing the qualities of our western grown that it alone will produce rapid gains, giving a meat of good quality. That where possible to supply them, a small addition of grain or screening will add to the gains and improve the quality, but if used in large quantity, the cost of production is increased beyond a profitable limit. These tests also proved conclusively that damaged grains could be used along with clover to good advantage in fattening lambs, and where the more expensive marketable grains were used in large quantity their use was not profitable. Therefore that which has been determined with regard to these three foods in the Gallatin valley will apply also to every part of the state in which these can be grown.

During the winter of '99 and 1900 three lots of lambs were used in a feeding test. Lot I. received clover and damaged wheat. Lot II. clover only, and Lot III. clover and oats. Within this period of ninety days, the lambs feeding on clover alone consumed an average of 3.16 pounds per head per day. The two lots receiving .93 pounds of oats and wheat, respectively, per head, each day, consumed only 2.14 pounds of clover per day.

The gains made during the ninety days were as follows: Lot I., fed clover and wheat, thirty pounds each; Lot II., fed clover only, twenty-four and three-tenths pounds; and Lot III., fed clover and oats, thirty-one and three-quarters pounds each. Considering the fact that nearly a pound of grain was fed to each lamb, per day, in two of the lots, the showing made by clover alone is remarkably good. With lambs of the range type feeders seldom reach a gain of ten pounds per head per month when both hay and grain are used.

Cost of feeding:—Clover hay was charged up at \$6 per ton; damaged wheat at 40 cents per cwt., and oats at 90 cents. At this rate the cost of food for each of the three pens, of twenty lambs, for ninety days, was as follows: Lot I., clover and wheat, \$19.38; Lot II., clover only, \$17.21; Lot III., clover and oats, \$27.95. As the total gains per pen, in order above given, were: Lot I., 601 pounds; Lot II., 486 pounds, and Lot III., 635 pounds, the relative cost of production was as follows: The lambs on the clover and wheat ration produced a hundred pounds increase at a cost of \$3.22; clover alone, \$3.54, and clover and oats, \$4.39. These results show conclusively that though clover alone did not give absolutely the most rapid or cheapest increase, still, there was little difference between it and the clover and wheat ration, and that satisfactory gains and financial returns can be obtained from the clover alone. They also show that oats at the price charged, cannot be profitably used for fattening lambs, except in small quantities.

The profits derived from these three methods of feeding, at the end of ninety days, were:

Net profit per head from lambs fed on clover and wheat....	96c.
Net profit per head from lambs fed clover only.....	82c.
Net profit per head from lambs fed clover and oats.....	62c.



The lambs were bought at \$3 each, and sold at the rate of \$4.68 per cwt., live weight.

We conclude from the results of Lot I., that cheap or unsalable grains can be used to good advantage along with clover for fattening lambs, and also that while the clover alone gave good results, we believe that where possible a small amount of grain fed with it will increase the gain, and add to the quality, but large quantities are not necessary with the quality of clover here produced. From the data obtained it was found that eleven and one-eighths pounds clover was required to maintain the animal and produce a pound of gain. Thus one ton of clover produced 169.5 pounds of mutton, which, at the selling price of \$4.68 per cwt., was worth \$7.93.

The results obtained lead us to conclude that with the conditions which Gallatin valley presents, the possibilities for mutton production are unparalleled. In the first place, the best foods for the purpose can be grown abundantly, and secondly, the stock can be readily procured within the state to consume it. Individual acres of clover, grown at the experiment station, for three successive years produced over one and one-half tons of hay at from one hundred and nineteen days to one hundred and thirty-three days from date of seeding. During the summer of 1900 a field of 7.26 acres of clover on the station farm produced at two cuttings a total of thirty-five tons, 1,451 pounds of well-cured hay. While this food can be produced in such great abundance, it has the advantage of possessing a large percentage of those nitrogenous compounds or flesh formers, which the eastern feeder who relies chiefly on corn or screenings, cannot buy. The clover produces a much better quality of meat than the starchy foods, such as corn, screenings, wheat, barley, etc., which is an important factor.

While the production of clover, alfalfa and alsike are desirable as well as their conversion into mutton, this industry need not interfere in any way with the grain producer of the irrigated valleys. On the contrary, they must materially assist him, as they can take the place of the vast summerfallow areas. These legumes can be secured for winter feeding without decreasing the grain area.

Where clover forms a part of the grain-growers' rotation, and is fed during the winter season lambs can be secured after harvest and made to glean from the stubble with profitable returns.

The Montana farmer in securing his enormous crops of grain loses a product of harvesting and threshing because of the arid conditions which result in so much shattering of grain. In addition to the grain left among the stubble, the meadows or clover fields provide a late growth which may be utilized by sheep. Then there are weeds and grasses found bordering along ditches, fences and roads which can be made use of. In most cases no return is secured from these waste products.

In securing lambs, prior to the time of winter feeding the Experiment Station was enabled to secure data relative to the capability of cattle, sheep and swine to utilize the waste products of the farm, and also the return which could be secured from it. Two hundred and thirty lambs were given access to 112 acres of the Station farm on October 15th, 1900, where they were allowed to forage for one month. This tract of land consisted of 57 acres of clover meadow and the balance of grain stubble. At the same time nineteen yearling steers and heifers, three colts and twenty-five pigs were maintained on the same tract. The lambs were turned on the stubble fields with an average weight of 50.86 pounds, and when removed, one month later weighed 60.64 pounds, making a gain of 9.78 pounds each. Thus the total increase of 2,249 pounds of mutton, at 5 cents per pound, is worth \$112.45. As it was necessary to feed the band 1,100 pounds of hay during storms, the

actual return was reduced to \$109.15, the hay having been charged up at \$6 per ton. The 1,100 pounds of clover fed was used during a snow storm which covered the ground two and one-half days. Sheep being close feeders, are better able to secure the waste products of the farm than cattle. Nor is the sole benefit to be derived from a monetary standpoint, for the farm receives a most thorough cleaning from the sheep, which does the work of the scavenger in handsome fashion. There are few plants that the sheep will not eat if allowed access to them before they become dead and woody. And any weed seeds consumed by them do not escape being destroyed.

Where clover or alfalfa can be grown on our ranches sheep can be used to good advantage in securing the waste products during the autumn season. Coming from the scant ranges, they are thus prepared to go on winter feed in good form. No losses have accrued during the two past seasons from sheep feeding on frozen pastures, even though death from bloating has caused serious loss earlier in the season.

We believe it is possible for the ordinary farmer who uses alfalfa or clover in his rotation to feed at least a carload or two of sheep each winter. There is no other way in which these foods can be disposed of to better advantage than when marketed in the form of mutton. This system will also assist greatly in maintaining the fertility of the forms, not only by leaving the fertilizer on them, but by the benefits which the land receives from the growth of legumes as well.

The Experiment Station is continuing to investigate sheep-feeding problems, and expects to obtain some valuable practical data during the present season. Five bunches of lambs are being fed. Lot I. receives clover and first-class marketable grain, Lot II. clover and screenings, Lot III. clover only, Lot IV. grain, hay, and Lot V. the same as Lot I., but are supplied with water once a day only, while the others have constant access to it. So far as we can determine at present, lots 2 and 3 are making favorable gains as compared with lot 1, and the increase is being produced at a much smaller cost. Where the lambs have constant access to water the gains so far have been over 200 pounds per head per month greater than those on the same feed but watered only once each day. As soon as this test is complete the results will be published in full.

The necessity of securing the proper type of lambs for feeding is a question of much importance. During the last two seasons comparative results have been secured by feeding lambs of the mutton and wool-producing types by similar methods. Those of the mutton type used contained a large percentage of Shropshire blood. They were large-framed and strong-boned, cylindrical of form, possessed of broad, evenly fleshed backs, with good widths at brisket, chest and shoulders. The other class, composed of Merino grades, were almost the reverse as to general form and quality. The compact lamb of the former class carrying a large quantity of natural flesh. When fed on an expensive ration of clover and oats, produced a hundred pounds of increase at a cost of \$4.39, while those of the inferior type, using the same kind of food in exactly the same amount cost \$4.65 per cwt. increase. The lambs of the mutton type required over one-half pound less clover to each pound of increase.

The results already secured justify conclusions to the effect that mutton can be successfully produced on alfalfa, red clover or alsike alone, though the use of a small grain allowance is desirable where possible because of its ultimate effect on quality. Where clover or alfalfa may have been damaged and rendered unsalable it cannot be used in a better way than as food for sheep. There are so many portions of the state suited to the growth of alfalfa, red clover and alsike that their use in mutton production cannot be too strongly urged.

## A Profitable Montana Industry.

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Experiments Demonstrate That Goat-Raising in Montana Can Be Made an Especially Lucrative Industry.

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One industry that has so far been given little attention, but in the several instances where experiments have been made has proved a success, is the raising of goats. The climate of the country is just to the goats' liking, and the mountain ranges and the many branches of smaller hills offer a model pasture, and one that is practically limitless, and will forever remain in the public domain. The goat is easily adaptable to almost any country, thriving in almost any climate from the extremely hot to the extremely cold, but prefers an equable climate and the rugged mountain side for its pasturage and the pinnacle rocks for a lookout, and under these conditions, with the slightest care, it does not fail to prosper. The goat is hardy, agile, enterprising, and only demands a shelter from the rain or snow storms in order to thrive. One of the chief advantages of Montana for the profitable growing of goats is the excellent winter pasturage. The native habitat of the Angora is not better adapted to its keep and development than are the mountains and foothills of the western half of Montana.

At present there are probably less than half a million goats in the United States, and last year the country imported goat skins to the value of \$25,508,249, the price ranging at over 39 cents per pound, and the weight running something over four pounds to the skin.

Treating the subject of goat-raising in this country, the Annual Year Book of the United States Department of Agriculture says that if all goats in this country were kept with the single object of supplying skins for market, they would fail to supply a small fraction of the present demand, and at the same time remain at their present number. At four pounds to the skin, which is not far from the average weight of dry skins, it requires the slaughter of 16,226,621 goats and kids to yield the skins imported during the last fiscal year. This represents live flocks of foreign goats aggregating from twenty-five to thirty millions at least for our present supply of marketable skins alone.

Very few of the goats in the United States are raised for the purpose of marketing their skins. In addition to the large proportion of the common stock kept, as stated, in the suburbs of cities, many are kept in parts of the west with sheep for protection against other animals, as dogs, wolves and coyotes; while the increasing flocks of Angoras are kept principally for their valuable yield of mohair, though some account is now taken of the meat.



It should be noted that something like two-fifths of all the goats in the United States, and a much larger proportion of those kept in flocks, are not the common goats which supply such skins as are imported for leather, but are in part descendants of these, modified by successive infusions of pure Angora blood; and in part, but to a less extent, pure Angoras, kept in California, Texas, Oregon, Idaho, Iowa, Georgia and South Carolina in flocks sometimes numbering thousands, and in other states in smaller numbers. The profitable commercial product of these pure and high-grade animals is the silky fleece.

### Goat Products.

In goat-keeping on a large scale it is not alone the skins and fleeces which enter into the account of profit, although these are primary, especially for distant markets. If the skins, which represent over fifteen millions of invoice and twenty-five millions of market value in importations, represented native stock, there would be taken additionally into the home market and possibly profit account nearly the whole animal—the flesh, tallow, bones, hoofs, horns, and perhaps the intestines and their contents, which together may constitute half or more of the entire marketable value. In addition there may be derived from the mature females (always the principal portion of the flock) during much of their lives a considerable value in milk for household uses or for market, or which can be converted into the most salable cheese, such as the Roquefort, Mont D'Or, Le Sassenage, and Levroux of France and Switzerland. So fully is the goat available as a dairy animal, when bred to that object, that it is sententiously described as "the poor man's cow," because of the combination of value with economy of keeping. A female goat is relatively one of the most profitable of domestic animals. Herded goats, under suitable and usually convenient conditions, whether for skin or fleece and by-products, are as surely profitable.

As to the question of suitable and sufficient labor so far as it enters into this subject, the fact that the utilization of unimproved or surplus farm lands is being considered as the food basis of goat-herding will readily suggest that whatever labor may be required must be distributed through the country at least as evenly as the labor required for the accompanying improved lands. Goat-herding is proposed only as another and very simple rural industry where others are already established, and therefore where the labor element is already available. Its cheapness depends upon the usual considerations to a certain extent, though not wholly, for herding requires neither the maturity nor the skill on the part of the attendants that usual farm occupations demand. Ordinarily, goats need less attention than sheep, but where permitted to range an attendant is necessary. It is apparent that this attendant need not be an expensive one.

But in making marketable whatever is derived from the keeping of goats, as the skin, wool or hair, meat, or, during life, the milk and its product, more and varied care is required, calling for average labor compensation. This labor is in no case continuous, however, for the principal products, but seasonal, like the harvests.

As already indicated, the useful objects of goat-keeping are distinctly

three, viz., for the production of skins, so extensively known to the commerce of manufacturing countries; for the production of fleeces of hair or wool, used also in increasing quantity in the manufacture of clothing fabrics, and for the production of milk, mostly for home consumption, and of cheese for home use and market. Often these objects of production are combined to some extent and with varying prominence; for goats best suited economically for skins for leather or for hair or wool products may also be bred as serviceable dairy animals, while those bred particularly for dairy purposes are secondarily valuable, at least, for the final products (skins, meat, etc.), especially where kept in considerable numbers.

These specified objects roughly, but perhaps sufficiently, indicate the classes of domesticated goats prevalent in various countries, and inferentially the conditions attending their prevalence. As the greatest market demand is for skins, the largest herds in various countries are kept to meet that demand, and as the demand relates less to breeding than to abundance, the common goat (that least modified from the native stock) most economically and profitably meets the requirement. Common goats need the least care, and require only the cheapest and most primitive pasturage—bushes and weeds. They furnish a product of world-wide use, not dependent upon any culture for its availability or excellence. Wherever they can be stocked upon unused or otherwise unsalable lands, with the rude and slight care required, they are almost gratuitously profitable. Thus, the price paid for imported goat skins is less representative of cost of production than of the commercial sagacity of the producers and their appreciation of the needs of the market, and suggests an enviable margin of profit.

Thus far goat-keeping has been considered only in relation to the commercial and direct profits promised in the varied or combined branches which yield skins for leather, fleeces and dairy products, though minor sources of gain have been indicated, such as the meat, hair, bones, etc. But there is still another source of incidental but sure profit, which would be sufficient in thousands of cases, even if the others be largely lost sight of and goats be kept simply as goats, and therefore differing in habits from other domesticated animals. The goat, of whatever class, is a reliable and life-long scavenger, and can be depended upon to destroy the many undesirable products of cultivated and fallow lands, the abundant and persistently weedy vegetation which so incessantly besets the cultivated crops. Other domestic animals prefer the cereals and grasses which depend upon the labor and care of the husbandman. What these reject goats prefer, and cheerfully pass by growing grass and grain for a constant dessert of wild carrot, burdock, mullein, or for thistle or cactus. Goats thus voluntarily clean fields of their vegetative refuse before it ripens and scatters its seed; and so persistently and impartially is this done that the latent seeds of valuable grasses, improving the chance thus given them to sprout and thrive, often follow the second or third year of goat pasturage with a uniform carpet, clean as if made to order.

In writing the Bureau on the subject, one of the largest goat-raisers in Texas says: "The Angora goat comes nearer living on nothing than any other animal and remaining rolling fat all year. Where there is no water on

the range they may be watered at home from a well, and where they are kept in a wolf-proof pasture they need not be herded, as they love their home better than any other quadruped. If there is any grass-eater that pays for its food it is the Angora goat, and it lives without eating grass. In the first place its mohair will bring from \$1 to \$2 a year, and the kid that is raised is worth from \$10 to \$25, and when you want extra fine meat you can butcher an Angora mutton weighing from 40 to 100 pounds. This meat tastes more like fat venison than it does like mutton, and is about the most wholesome meat in the world. If you kill the mutton in the fall, when its hair is from 6 to 12 inches long, the hide will bring from \$2 to \$5 undressed. The meat I have generally sold from 5 to 6 cents a pound."

## Report of *The* State Register of Lands.

The Income From the State Lands Show a Constant and Very Large Increase.

The report of the State Land Register, Mr. H. D. Moore, covering in brief the work of his department for the last two years, is interesting in that it shows the large income the state is now enjoying from its lands, and the rapid increase made under this administration indicates the revenues of the future that may be anticipated. Mr. Moore says: "During the year 1898 this office issued new five-year leases for 306,617 acres, yielding a revenue, at  $6\frac{1}{4}$  per cent. of appraised valuation, of \$35,544.60.

"For the year ended I issued 570 new five-year leases at the same rate covering 388,711 acres, yielding annual rental in the sum of \$42,767.34, making a total of 1,912 leases and permits now in good standing, which yield an annual revenue of \$144,383.76, and cover one million, two hundred and sixty-five thousand, eight hundred and ninety-five acres. After allowing for renewals, this makes a net increase in rentals of \$35,077.66 over 1899.

The following table shows the amount received from rentals during the past eight years:

1893 .....	\$13,982 54	1898 .....	75,063 06
1894.....	14,094 00	1899 .....	109,306.10
1896.....	19,163 50	1900 .....	144,383 76
1895 .....	27,134 77		
1897.....	47,618 26	Total .....	\$450,745 99

The present administration has collected in rentals the sum of \$376,371.18 during the past four years, as against \$74,374.81 collected during the preceding four years.



The following table shows the total receipts from the state land grants for the several years from 1892 to 1900:

1892.....	\$44,718 53	1898.....	126,833 71
1893.....	26,627 85	1898.....	200,195 20
1894.....	42,169 81	1900.....	200,275 25
1895.....	44,363 59		
1896.....	42,689 07	..Total.....	\$830,759 54
1897.....	102,886 53		

Total receipts for four years of the present administration being \$630,190.69, as against \$155,750.32 for the preceding four years. The foregoing figures are given to show the growth of the business of this office.

While the total receipts of the office were only slightly in excess of last year, this is accounted for by the decrease in the amount received from sales of land and timber. It is contrary to the general policy of the department to sell the lands, it being held that it is better for the state to derive a revenue of  $6\frac{1}{4}$  per cent. of the appraised valuation of the land from leases than to sell and let the money lie idle. The receipts from these sources were almost \$35,000.00 less than last year; however, this was more than made up by the great increase in rentals from leased lands. There are some large payments from timber permits, amounting to over \$28,000.00, which properly belong to this year's business, but which were not paid in time to be included therein, and will therefore swell next year's receipts.

"I have, under the direction of the Board of Land Commissioners, after properly advertising and offering for sale to the highest bidder, issued permits to cut timber as follows:

Date.	Name.	Fund.	Rate.	Feet— Estimated Amount.
Jan. 1899	John Rankin ..	School.....	\$2.00 per M	350,000
Jan. 1899	Fred Cormier ..	A. C. Bond ..	2.00 per M	2,445,000
Mar. 1899	Blackfoot Milling Co ..	School.....	4.30 per M	6,000,000
Mar. 1899	Big Blackfoot Milling Co ..	School.....	4.00 per M	5,100,000
Apr. 1899	W. J. Kendall ..	School.....	2.05 per M	4,900,000
Apr. 1899	W. J. Kendall ..	University ..	2.05 per M	3,950,000
June 1899	Big Blackfoot Milling Co ..	A. C. Bond ..	2.00 per M	8,966,000
June 1899	Big Blackfoot Milling Co ..	Normal School ..	2.00 per M	28,425,000
June 1899	Big Blackfoot Milling Co ..	School.....	2.00 per M	3,750,000
June 1899	Big Blackfoot Milling Co ..	D. & D. Asylum ..	2.00 per M	1,200,000
June 1899	H. W. McLaughlin ..	A. C. Bond ..	2.00 per M	4,230,000
Sept. 1899	J. O. Hanratty ..	A. C. Bond ..	2.00 per M	1,671,000
	Total .....			51,077,000

"About one-half of this timber has been cut and paid for, but as an extension of time upon the higher priced timber has been granted by the Board, and as the log sales materially overrun the estimates, the timber to be cut during the ensuing year will probably yield \$100,000.00, to be divided among the several funds.

"The bulk of the timber sold was surrounded by timber lands sold by the Northern Pacific railway, and being cut over, made the risk from forest fires very great, hence it was deemed best to sell, a good price being obtained.

"In all of my previous reports I have urged that all school and university lands be withdrawn from sale, one reason being that it is more to the interest of the schools to receive an annual income from rents than to sell the lands

and trust to the opportunity arising for the favorable investment of the funds derived from the sales, the practical result being that a large part of the funds lie idle and produce no income whatever. Any lands that can be sold can be leased at a good figure, and if not sold, will constantly increase in value. All of the state land departments that I have communicated with agree with me on the foregoing question, and comment on the impossibility of finding proper investments for their permanent funds. This policy was pursued by the Board of Land Commissioners during the past year, only 842 acres being sold.

"In a former report I recommended that the unsurveyed school sections 16 and 36, within the limits of the several reservations be carefully examined, so that all of the land that is of little or no value may be relinquished to the United States, as provided by law, and valuable grazing lands be selected in lieu thereof while they may be obtained, it being simply a good business proposition to change 700,000 acres of practically worthless land, which the state cannot get possession of during the present generation, for an equal amount of land, worth now from \$2 to \$5 per acre, and which will yield \$87,500.00 in rentals per annum at the present rates. I cannot urge too strongly that this be done as soon as possible, and this revenue secured, and would say in conclusion that unless this be done, we cannot supply the demands made by the stockmen of this state for the selection and leasing of lands.

"This policy has been carried out as rapidly as possible, and the state has relinquished in the

Fort Peck Indian reservation.....	115,840 acres.
Blackfeet Indian reservation.....	88,480 acres.
East half Lewis and Clarke Forest reservation...	86,560 acres.
Bitter Root Forest reservation.....	24,180 acres.

Total ..... 315,060 acres.

"These lands were of no value to the state, and we have secured lands easily worth one million dollars, and which are already paying 4 per cent. income on that amount in rentals (\$40,000.00 per annum) for the benefit of the school fund.

"The effect of the policy pursued by the department will be seen by the amount of school money distributed per capita for the past four years:

Year—	School Census	Amt. Per Capita
1897.....	46,179.....	\$8.38
1898.....	49,478.....	.58
1899.....	53,632.....	1.50
1900.....	51,210 estimated.....	2.00

"It will be seen by the above table that in the face of an increase in school population of 11,031 in the past four years, the funds distributed have increased from 38 cents per capita in 1897 to two dollars per capita in 1900, which will be distributed this year, and it is safe to say that, if the present policy is pursued by the incoming administration, the per capita distribution will soon reach \$3.00. It is needless to point out the benefit both the schools and the taxpayers derive from this.

"The state is still entitled to indemnity selections in the several reservations as follows, to-wit:

Ft. Assiniboine Military Reservation .....	8,960 acres
Ft. Keogh Military Reservation .....	3,840 acres
Total .....	12,800 acres

"I recommend that none of these lands be relinquished, as, when the reservations are thrown open to settlement, the school sections will be valuable, and will not be lost through the intervention of settlement or Indian allotment rights. There is also:

Flathead Indian Reservation .....	59,520 acres
Ft. Belknap Indian Reservation .....	33,920 acres
North Cheyenne Indian Reservation .....	17,280 acres
Crow Indian Reservation .....	182,400 acres
Flathead Forest Reserve .....	76,000 acres
Gallatin Forest Reserve .....	5,760 acres
Balance of Lewis and Clarke Forest Reserve .....	79,680 acres
Balance of Bitter Root Forest Reserve .....	14,600 acres
Total .....	469,160 acres

"I recommend that a careful examination, as far as possible, be made of the lands in the last named reservations to the end that those sections which are found to be on rugged mountains or barren plains, or are worthless to the state, or are settled upon by Indians or halfbreeds, and therefore lost, be relinquished to the general government, and lands selected in lieu thereof. We can thus exchange about 400,000 acres of lands worthless to the common schools of the state for an equal amount of first-class grazing land, which will always increase in value, and which can be immediately leased and yield a revenue of 4 per cent. on a valuation of one and one-quarter million dollars.

SHOWING ACREAGE, ACRES APPRAISED, APPRAISED VALUATION, AND VALUE OF TIMBER BELONGING TO THE SEVERAL GRANTS.

GRANT.	Acres.	Acres Appraised.	Appraised Value.	Value Timber.	Total Value.
School .....	2,170,234	1,609,496	\$3,015,155.68	\$353,742	\$3,368,897.68
Public buildings .....	149,932	149,028	193,135.40	563,370	756,506.40
Agricultural College (B. & I.) ..	134,486	134,486	196,361.23	272,216	468,577.23
School of Mines .....	96,735	96,735	143,536.92	221,970	370,506.92
Normal School .....	98,590	98,590	153,444.36	164,250	317,694.36
Reform School .....	49,817	49,817	73,568.61	52,700	126,268.61
Deaf and Dumb Asylum .....	50,000	50,000	65,563.32	96,260	161,823.32
University .....	46,080	46,080	142,600.77	9,200	151,800.77
Total .....	2,795,874	2,234,232	\$3,988,366.29	\$1,733,708	\$5,722,074.49

SHOWING CLASSIFICATION OF APPRAISED LANDS BELONGING TO THE SEVERAL GRANTS.

GRANT.	Acres Grazing.	Acres Agricultural.	Acres Timber.
School.....	1,614,507	67,362	67,754
Public Buildings.....	77,691	2,480	68,456
Agricultural College (B. & I.).....	90,422	1,009	43,043
School of Mines .....	67,717	1,502	27,516
Normal School .....	68,755	830	29,024
Reform School.....	41,230	.....	8,485
Deaf and Dumb Asylum ..	30,329	.....	19,571
University .....	31,217	8,565	1,587
Totals .....	2,021,968	81,748	265,436



SHOWING AMOUNTS RECEIVED FROM THE VARIOUS LAND GRANTS FOR  
THE FISCAL YEAR ENDING NOVEMBER 30TH, 1900.

Grant	Sales.	Interest.	Leases.	Timber
School .....	\$10,711.12	1,844.57	\$112,467.95	\$11,315.41
University .....	3,873.94	974.08	4,903.39	4,496.69
Public Buildings .....			3,754.90	
School of Mines .....			5,980.03	
State Normal School .....			5,727.22	12,085.56
Agricultural College (Bond) .....			356.75	10,499.45
Agricultural College (Income) .....			6,408.75	
State Reform School .....			2,364.30	
Deaf and Dumb Asylum .....			2,420.47	90.67
Totals .....	\$14,585.06	\$2,818.65	\$144,383.76	\$38,487.78

## RECAPITULATION.

	1899.	1900.
Land Sales (1st payments) .....	\$27,098.72	\$5,187.20
Land Sales (Deferred Payments) .....	18,952.61	9,397.86
Interest on Deferred Payments .....	3,171.54	2,818.65
Sales of Timber .....	41,666.23	38,487.78
Rents.....	109,306.10	144,383.76
Totals.....	\$200,195.20	\$200,275.25

SHOWING AMOUNTS RECEIVED FROM RENTALS AND FROM SALES OF  
LANDS AND TIMBER FOR FISCAL YEAR ENDING NOVEM-  
BER 30TH, 1899 AS APPORTIONED TO THE SEVERAL FUNDS.

Fund.	1899.	1900.
Permanent School .....	\$45,726.94	\$22,026.53
School Income .....	79,265.80	114,442.52
Permanent University .....	10,257.05	6,449.18
University Bond.....	5,241.04	7,698.92
State Capitol Int. and Sinking .....	4,422.44	3,754.90
School of Mines Building .....	5,976.73	5,980.03
Normal School Bond.....	21,500.56	17,812.78
Agricultural College Bond .....	9,023.86	10,856.20
Agricultural College Income .....	7,456.67	6,408.75
Reform School Building .....	2,274.10	2,364.30
Deaf and Dumb Asylum Building .....	9,230.01	2,511.14
Totals .....	\$200,195.20	\$200,275.25

SHOWING ACREAGE OF SEVERAL GRANTS LEASED DURING FISCAL  
YEAR 1900, AND TOTAL ACREAGE UNDER LEASE AT THE  
CLOSE OF THE FISCAL YEAR 1900.

FUND.	1900.		TOTALS.	
	Acres.	Rents.	Acres.	Rents.
School .....	370,797	\$40,946.04	995,912	\$112,467.95
University .....	3,300	385.00	25,875	4,903.39
Capitol Building .....	4,660	367.50	33,358	3,754.90
School of Mines .....	1,680	207.50	51,563	5,980.03
Normal School.....	2,954	314.80	47,271	5,727.22
Agricultural College (Bond) .....	800	140.00	1,520	356.75
Agricultural College (Income) .....	1,480	129.00	64,542	6,408.75
Reform School .....	2,240	192.50	22,892	2,364.30
Deaf and Dumb Asylum .....	800	85.00	22,962	2,420.47
Totals.....	388,711	\$42,767.34	1,265,895	\$144,383.76

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SHOWING ACREAGE UNDER LEASE IN THE SEVERAL COUNTIES AT  
CLOSE OF FISCAL YEAR 1900.

County	Acreage.	County	Acreage.
Beaverhead .....	93,009	Lewis and Clarke .....	58,316
Broadwater .....	6,711	Madison.....	46,856
Carbon .....	9,950	Meagher .....	99,230
Cascade .....	127,178	Missoula .....	7,255
Choteau .....	283,963	Park .....	13,667
Custer .....	25,795	Ravalli .....	17,760
Dawson .....	5,264	Silver Bow .....	2,443
Deer Lodge .....	49,363	Sweet Grass.....	38,320
Fergus .....	184,772	Teton .....	86,399
Flathead .....	12,374	Valley .....	8,005
Gallatin .....	38,920	Yellowstone .....	41,877
Granite .....	4,640		
Jefferson .....	6,128	Total .....	1,265,896

SHOWING TOTAL SALES OF STATE LAND SINCE ADMISSION, AND FROM  
WHAT GRANTS.

GRANT.	Acres.	Selling Price.	Average Price Per Acre.
School .....	14,420.85	\$173,651.45	\$12.04
University .....	3,721.25	42,783.65	11.50
Capitol Building .....	681.98	1,459.80	11.01
Reform School .....	960.00	9,600.00	10.00
Normal School .....	160.00	1,920.00	12.00
Deaf and Dumb Asylum .....	560.00	6,760.00	12.07
Agricultural College (Bond) .....	116.30	1,163.00	10.00
Totals .....	20,620.38	\$243,337.90	\$11.80

## SALES OF TOWN LOTS.

	Lots.	Selling Price.
Missoula School Addition .....	259	\$20,943.09
Aldridge School Addition .....	22	371.00
Virginia City School Addition .....	2	100.00
Total .....	283	\$21,414.09
Grand Total .....		\$264,751.99

SHOWING THE SALE OF LANDS AND TIMBER FOR THE YEARS 1899 and 1900  
SCHOOL (LAND.)

COUNTY.	1899.		1900.	
	Acres	Selling Price.	Acres.	Selling Price.
Beaverhead .....	5.00	\$60.00		
Cascade .....	46.26	462.60	160	\$1,920.00
Custer.....	20.59	205.90	320	3,200.00
Choteau .....	325.06	3,250.60		
Deer Lodge .....	800.00	8,000.00		
Fergus .....	40.00	400.00	160	1,600.00
Gallatin .....	82.00	820.00		
Lewis and Clarke .....	305.12	3,051.20	120	1,200.00
Madison .....	16.00	160.00		
Meagher .....	2.00	20.00		
Missoula .....	160.00	1,600.00		
Missoula (Lots 34).....		1,785.00 (68)		3,345.00
Ravalli.....	320.00	4,000.00		
Silver Bow .....	320.00	3,200.00		
Park (Aldridge Lots) .....		87.50		
Totals .....	2,442.03	\$27,102.80	760	\$11,265.00

## UNIVERSITY (LAND.)

Flathead .....	608.42	\$6,084.20	82.70	\$827.00
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## DEAF AND DUMB ASYLUM (LAND.)

Missoula .....	560.00	\$6,760.00	.....	.....
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## AGRICULTURAL COLLEGE BOND. (LAND.)

Missoula .....	116.30	\$1,163.00	.....	.....
Totals .....	3,726.75	\$41,110.00	842.60	\$12,092.00

## TIMBER SALES

	1899.	1900.
School .....	\$18,690.60	\$11,315.41
University .....	.....	4,496.69
State Normal School .....	15,688.35	12,085.56
Agricultural College (Bond) .....	7,287.28	10,499.47
Deaf and Dumb Asylum... ..	.....	90.67
Total .....	\$41,666.23	\$38,487.78
Grand Total of Land and Timber .....	\$82,776.23	\$50,579.78

Mr. Henry Neill, the State Land Agent, in his report says: "There were selected in the past year by your agent 228,814.39 acres of land; 7,340.88 acres of which is valuable timber land, and the remainder is grazing land, selected on the application of prospective lessees; 208,690 acres has been placed under lease at the rate of \$80.00 per section per annum; 4,000 acres selected in the Judith Basin is fine bench land, and it is the belief of your agent that this land will soon be worth \$10.00 per acre, as most of it can be farmed. It has been my policy during the performance of my official duties to select such lands as in my judgment will prove valuable in the near future, without waiting for some applicant to lease. Nearly all this land selected is placed to the credit of the school fund as indemnity school land, in lieu of sections 16 and 36, which fall within the Fort Peck and Blackfeet Indian reservations, and part of the Bitter Root and Lewis and Clarke Forest reserves. All the lands desired to be relinquished by the board have been fully covered by indemnity selections.

"There are remaining approximately 500,000 acres of school lands tied up in Indian and Forest reserves. If the state will surrender these lands and secure others in lieu thereof, the lands so taken could be leased at the rate of \$80.00 per section per annum, making an annual rental of \$62,500.00. It is fair to assume that some of these reserves will not be thrown open for twenty-five years. If the state in the meantime had her lands to lease, the school fund would be increased over one million dollars. I believe it would be a wise policy for the state to relinquish its school lands in these reserves as soon as possible, thereby adding materially to the school fund.



# The State Lands.

## Selections and Apportionments of the State Educational and Public Buildings Lands.

The report of the State Land Commissioners says that the two fiscal years of 1899 and 1900 have brought flattering returns to the department. The work of appraising and classifying the state lands is now complete, with the exception of the school lands in the recent surveys. As plats of the new surveys are filed in the state land office immediately after approval by the Surveyor General of Montana, we find that the school lands in the new surveys amount to 219,086 acres, located in the following counties:

Beaverhead .....	11,598.12 acres	Madison .....	640.00 acres
Carbon .....	19,904.85 acres	Meagher .....	4,480.00 acres
Cascade .....	1,799.21 acres	Missoula .....	5,792.99 acres
Choteau.....	87,179.25 acres	Ravalli .....	1,280.00 acres
Dawson .....	20,442.23 acres	Sweet Grass .....	9,482.99 acres
Deer Lodge .....	640.00 acres	Valley .....	30,634.13 acres
Fergus .....	2,560.00 acres	Yellowstone .....	640.00 acres
Flathead .....	19,048.80 acres		
Lewis and Clarke .....	4,964.30 acres	Total .....	219,086.20 acres

While practically none of this land is appraised, still there is considerable of it leased under yearly permits which run from year to year, until the land is appraised and properly advertised for sale and lease.

During the year 1899 the state selected 218,058.34 acres and in 1900, there were selected 228,814.39 acres, making a total of 446,872.73 acres. Of this amount 13,943.58 acres are good timber lands located in the western part of the state, and selected mostly for the credit of the Capitol Building grant. The remainder is classified as grazing land, and has been selected on the application of prospective lessees, and placed to the credit of the school fund as indemnity school selections.

To meet the demands made for the leasing of state lands the board deemed it advantageous to the school fund to relinquish the school lands in some of the Indian and Forest reservations, and select in lieu thereof indemnity lands, as provided by act of Congress. Accordingly, the school lands in the following reservations were relinquished and indemnity lands selected in lieu thereof:

Ft. Peck Indian Reservation .....	115,840.00 acres
Blackfeet Indian Reservation .....	88,480.00 acres
E. ½ Lewis and Clarke Forest Reserve.....	86,560.00 acres
Bitter Root Forest Reserve .....	24,180.00 acres
	315,060.00 acres

In addition to the selection of 315,060 acres in lieu of school lands lost by Indian and Forest reserves the state selected 52,281.45 acres of indemnity

school lands in lieu of school lands lost by reason of their being mineral in character, or claimed by settlers prior to the public survey, making a total of 367,341.45 acres of indemnity school lands selected in the last two years, and practically all placed under lease at the rate of \$80.00 per section per annum.

On December 15, 1898, the board, acting under the supervision of the Secretary of the Interior, relinquished to the United States 8,722.30 acres of undesirable selections made in 1893 in Flathead county, hoping thereby to secure more valuable timber lands in lieu thereof. The lands relinquished were credited to the following grants:

Agricultural College Bond .....	2,555.21 acres
Reform School .....	740.78 acres
School of Mines .....	1,738.40 acres
Normal School .....	1,799.36 acres
Deaf and Dumb Asylum .....	1,888.55 acres
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	8,722.30 acres

Subsequent to this relinquishment, however, that portion of Flathead county in which these lands are located was embraced in the Flathead Forest reserve by act of congress, together with other lands in this vicinity.

Under the provisions of an act of Congress approved June 4, 1897, the state is granted the privilege of surrendering its lands within the Forest reservation and selecting lieu lands therefor. The state therefore deeded to the United States 24,528.17 acres of approved selections belonging to the following grants, viz.:

School .....	6,119.17 acres
Agricultural College Bond .....	4,176.52 acres
Normal School .....	2,852.00 acres
Public Buildings .....	8,184.64 acres
Reform School .....	318.10 acres
School of Mines .....	2,867.14 acres
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	24,528.17 acres

In addition to the above, the state relinquished 2,634.67 acres of unapproved selections in said reserve, and belonging to the following grants, viz.:

Agricultural College Bond .....	634.67 acres
Normal School .....	640.00 acres
Reform School .....	1,040.00 acres
School of Mines .....	320.00 acres
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	2,634.67 acres

Under the provisions of the act of June 4, 1897, the state selected or "scripped" lands in lieu of state lands falling within the Flathead Forest reserve 4,118.04 acres to the credit of the following grants, viz.:

Agricultural College Bond .....	2,160.00 acres
Public Buildings .....	1,958.04 acres
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	4,118.04 acres

Of this "scripped" land, 3,838.04 acres are valuable timber lands, and 280 acres of agricultural lands, the former being located in Missoula county and the latter in Teton county. In this way the state was enabled to select unsurveyed lands, being thus placed on an equal footing with land and timber speculators who are filing upon valuable tracts of land with Forest Reserve scrip in advance of the public surveys.

To establish its preference rights in the selection of land, the state has made application for the survey of the following townships, viz.:

February 1, 1899.—Townships 30, 31 and 32 North; Ranges 7, 8, 9 and 10 East.

March 14, 1899.—Township 29 North; Ranges 24, 25, 27 and 28 West. Township 30 North; Ranges 23, 24 and 25 West. Township 31 North; Range 25 West.

June 6, 1899.—Townships 13 and 14, North; Ranges 24, 25 and 26 West. Township 16 North; Range 23 West.

July 3, 1899.—Township 9 North; Ranges 18 and 19 West. Township 10 North; Range 18 West. Township 11 North; Ranges 18 and 19 West. Township 12 North; Ranges 18 and 19 West. Township 13 North; Ranges 12, 18, 19, 23 West. Township 14 North; Ranges 12, 22, 23 West. Townships 15 North, Ranges 23, 25 West. Township 16 North; Ranges 22, 24, 25, 26 West. Township 17 North; Ranges 23, 24, 25, 26 West. Township 18 North; Range 27 West. Township 20 North; Range 27 West. Township 21 North; Ranges 25, 30 West.

The greater portion of this territory is covered with timber, and it is the desire of the board to secure as much as possible of this character of land for the Capitol Building grant, of which there remains 32,000 acres yet to select.

However, the Northern Pacific Railroad company having made application for a survey of a portion of this land several days prior to that of the state, intending thereby to select indemnity lands upon the even numbered sections under the act of Congress of March 2, 1899. The Commissioner of the General Land Office has decided that the prior application of the Northern Pacific Railroad company has secured it the preference in the matter in the following townships, viz.:

Townships 14 and 16 N. 22 W.; 13, 14, 15, 17 N. R. 23 W.; 1 and 17 N. Ranges 24 and 26 W.; 15, 16, 17, 21 N. R. 25 W.; 18 and 20 N. R. 27 W. and 21 N. R. 30 W.

Complying with the provisions of an act of the Fifth Legislative Assembly, approved March 8, 1897, the board, acting in conjunction with the Trustees of the School of Mines, advertised for bids for \$120,000.00 of School of Mines' bonds to take up the outstanding warrants, thereby stopping to a considerable extent the interest charges on said warrants.

Upon November 27, 1900, at a joint meeting, the bid of the State Treasurer to take the bonds at par, drawing 5 per cent. interest, said bonds to be payable in fifteen years, and maturing at the expiration of thirty years, was accepted, and the bonds ordered sold.

For a full statement of the leasing and sales of state lands, the reader is respectfully referred to the report of the Register of State Lands, and the status of the several grants is fully given in the following tables:



## STATUS OF SCHOOL LANDS.

COUNTY.	Acres Surveyed.	Indemnity Selections.	Total.	Acres Appraised.	Appraised Value.
Beaverhead .....	66,398.12	15,696.09	82,094.21	70,497.09	\$105,222.18
Broadwater .....	17,675.30	1,838.90	19,514.20	19,514.20	41,834.25
Carbon .....	37,850.79	.....	37,850.79	35,930.79	58,925.20
Cascade .....	80,011.21	50,402.06	130,413.27	102,616.28	179,016.12
Choteau .....	338,238.25	138,890.03	477,128.28	389,949.03	621,644.65
Custer .....	164,093.42	.....	164,093.42	164,093.42	214,320.90
Dawson .....	79,114.99	2,559.50	81,674.49	61,232.26	73,924.05
Deer Lodge .....	42,320.00	27,132.36	69,452.36	68,312.36	127,444.72
Fergus .....	226,200.00	69,859.46	296,059.46	293,499.46	427,468.92
Flathead .....	59,584.07	.....	59,584.07	40,535.27	60,802.00
Gallatin .....	32,952.00	1,280.00	34,232.00	34,232.00	70,480.00
Granite .....	9,840.00	.....	9,840.00	9,840.00	17,750.00
Jefferson .....	25,397.38	.....	25,397.38	25,397.38	35,967.06
Lewis and Clarke .....	43,061.18	11,264.08	54,325.26	49,360.96	96,285.98
Madison .....	70,492.97	9,598.31	80,091.28	79,451.28	100,270.80
Meagher .....	81,280.00	3,362.28	84,642.28	80,162.28	146,764.56
Missoula .....	28,719.17	.....	28,719.17	22,386.78	35,597.06
Park .....	34,918.95	.....	34,918.95	34,918.95	63,714.75
Ravallie .....	17,975.56	.....	17,975.56	17,975.56	36,154.30
Silver Bow .....	2,760.00	1,483.03	4,243.03	4,243.03	9,346.06
Sweet Grass .....	62,425.42	6,298.46	68,723.88	58,600.88	94,904.44
Teton .....	119,748.38	23,193.49	142,941.87	142,941.87	214,821.62
Valley .....	77,329.65	.....	77,329.65	46,696.50	63,328.36
Yellowstone .....	82,406.55	4,483.40	86,889.95	86,889.95	120,187.70
Totals .....	1,800,893.36	367,341.45	2,170,234.81	1,803,496.38	\$3,015,155.68

## CHARACTER OF APPRAISED SCHOOL LANDS.

COUNTY.	Acres Grazing.	Agricul- tural.	Timber.	M Feet Saw Timber.	Value at \$2.00 Per M.
Beaverhead .....	65,377.09	5,120.00	.....	.....	.....
Broadwater .....	16,201.02	3,313.18	.....	.....	.....
Carbon .....	33,970.79	1,960.00	.....	.....	.....
Cascade .....	94,681.03	4,535.25	120.00	.....	.....
Custer .....	160,090.02	4,003.40	.....	.....	.....
Choteau .....	379,462.52	6,276.25	.....	.....	.....
Dawson .....	60,102.59	1,129.67	.....	.....	.....
Deer Lodge .....	56,472.36	3,280.00	9,060.00	19,480.00	\$38,960.00
Fergus .....	291,419.46	1,440.00	640.00	100.00	200.00
Flathead .....	4,050.23	4,856.15	31,468.78	64,901.00	129,802.00
Gallatin .....	28,232.00	6,000.00	.....	.....	.....
Granite .....	7,680.00	1,520.00	640.00	.....	.....
Jefferson .....	24,757.38	640.00	.....	.....	.....
Lewis and Clarke .....	47,922.86	1,438.10	.....	.....	.....
Madison .....	67,270.97	3,220.00	.....	.....	.....
Meagher .....	77,442.28	2,720.00	.....	.....	.....
Missoula .....	3,300.00	2,180.00	19,086.00	63,020.00	126,040.00
Park .....	30,918.95	4,000.00	.....	.....	.....
Ravalli .....	7,835.56	2,720.00	6,140.00	29,370.00	58,740.00
Silver Bow .....	3,923.03	320.00	.....	.....	.....
Sweet Grass .....	56,388.85	2,212.03	.....	.....	.....
Teton .....	126,778.34	1,723.59	.....	.....	.....
Valley .....	45,809.92	885.58	.....	.....	.....
Yellowstone .....	84,719.95	2,170.00	.....	.....	.....
Totals ..	1,614,807.20	67,362.20	67,754.78	176,871.00	\$353,742.00

## AGRICULTURAL COLLEGE GRANT.

Total Grant .....	140,000.00 acres
Amount selected .....	134,486.05 acres
Amount approved .....	97,951.64 acres

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## STATUS OF AGRICULTURAL COLLEGE GRANT.

COUNTY.	Acres Selected.	Acres Appraised.	Appraised Value.	Rate Per Acre.
Beaverhead .....	9,636.30	9,636.30	\$12,035.47	\$1.25
Carbon .....	3,897.93	3,897.93	7,795.86	2.00
Cascade .....	760.00	760.00	1,520.00	2.00
Choteau .....	18,120.34	18,120.34	36,240.68	2.00
Deer Lodge .....	3,080.00	3,080.00	3,600.00	1.16
Flathead .....	27,185.21	27,185.21	27,728.91	1.02
Gallatin .....	3,093.71	3,093.71	6,292.38	2.12
Jefferson .....	4,645.84	4,645.84	5,492.09	1.18
Lewis and Clarke .....	10,062.74	10,062.74	21,332.10	1.98
Madison .....	15,918.58	15,918.58	17,510.20	1.10
Meagher .....	12,401.31	12,401.31	24,802.62	2.00
Missoula .....	14,457.26	14,457.26	14,457.26	1.00
Ravalli .....	5,760.00	5,760.00	6,520.00	1.12
Sweet Grass .....	1,280.00	1,280.00	2,560.00	2.00
Teton .....	4,186.83	4,186.83	8,373.66	2.00
Totals.. .....	134,486.05	134,486.05	196,361.23	1.46

## CHARACTER OF AGRICULTURAL COLLEGE LANDS.

COUNTY.	Grazing.	Agricult'rl	Timber.	Amount Saw Timber.	Value at \$2.00 Per M.
Beaverhead .....	9,636.30	.....	.....	.....	.....
Carbon .....	3,897.93	.....	.....	.....	.....
Cascade .....	760.00	.....	.....	.....	.....
Choteau .....	18,120.34	.....	.....	.....	.....
Deer Lodge .....	500.06	.....	2,580.00	6,140.00	\$12,280.00
Flathead .....	.....	689.64	26,495.57	74,598.00	149,196.00
Gallatin .....	2,773.71	320.00	.....	.....	.....
Jefferson .....	4,645.84	.....	.....	.....	.....
Lewis and Clarke .....	10,062.74	.....	.....	.....	.....
Madison .....	15,918.58	.....	.....	.....	.....
Meagher .....	12,401.31	.....	.....	.....	.....
Missoula .....	480.00	.....	13,977.26	55,370.00	110,740.00
Ravalli .....	5,760.00	.....	.....	.....	.....
Sweet Grass .....	1,280.00	.....	.....	.....	.....
Teton .....	4,186.83	.....	.....	.....	.....
Totals .....	90,422.58	1,009.64	43,042.84	136,108.00	\$272,216.00

## STATUS OF THE SCHOOL OF MINES GRANT.

Total grant .. .....	100,000.00 acres
Amount selected .. .....	96,735.05 acres
Amount approved .. .....	73,971.45 acres

COUNTY.	Acres selected.	Acres appraised.	Appraised value.	Rate per acre.
Beaverhead .....	10,564.82	10,562.82	10,736.13	\$1.05
Cascade .....	10,978.67	10,978.67	21,957.34	2.00
Choteau .....	24,039.58	24,039.58	48,079.16	2.00
Deer Lodge .....	1,509.15	1,509.15	2,263.72	1.50
Flathead .....	25,108.93	25,108.93	27,619.82	1.10
Gallatin .....	9,184.03	9,184.03	17,633.33	1.92
Lewis and Clarke .....	4,163.53	4,163.53	7,286.17	1.75
Madison .....	5,106.08	5,106.08	5,820.93	1.14
Meagher .....	80.00	80.00	160.00	2.00
Ravalli .....	3,280.00	3,280.00	3,340.00	1.01
Teton .....	2,720.26	2,720.26	3,640.32	1.34
Totals.. .....	96,735.05	96,735.05	148,536.92	\$1.34

## CHARACTER OF SCHOOL OF MINES LANDS.

COUNTY.	Grazing.	Agricul- tural.	Timber.	M feet timber	Value at \$2.00 per M.
Beaverhead .....	10,564.82	.....	.....	.....	.....
Cascade .....	10,978.67	.....	.....	.....	.....
Choteau.....	24,039.58	.....	.....	.....	.....
Deer Lodge .....	920.00	.....	539.15	400.00	\$800.00
Flathead .....	.....	1,461.80	23,647.13	97,685.00	195,370.00
Gallatin .....	9,144.03	40.00	.....	.....	.....
Lewis and Clarke .....	4,163.53	.....	.....	.....	.....
Madison .....	5,106.08	.....	.....	.....	.....
Meagher .....	80.00	.....	.....	.....	.....
Ravalli .....	.....	.....	3,280.00	12,900.00	25,800.00
Teton .....	2,720.26	.....	.....	.....	.....
Totals .....	67,716.97	1,501.80	27,516.28	110,985.00	221,970.00

## STATUS OF THE NORMAL SCHOOL GRANT.

Total grant .....	100,000.00 acres
Amount selected .....	98,590.02 acres
Amount approved .....	92,647.24 acres

COUNTY.	Acres Selected.	Acres Appraised	Value.	Rate Per Acre.
Beaverhead .....	18,713.57	18,713.57	\$39,427.14	\$2.00
Cascade ..	3,241.11	3,241.11	5,094.43	1.57
Choteau .....	15,671.25	15,671.25	31,342.50	2.00
Flathead .....	23,570.25	23,570.25	23,570.25	1.00
Gallatin .....	7,031.90	7,031.90	15,330.18	2.09
Lewis and Clarke .....	2,292.14	2,292.14	4,584.28	2.00
Madison .....	15,669.37	15,669.37	16,281.74	1.04
Meagher .....	1,120.00	1,120.00	2,240.00	2.00
Missoula .....	5,564.14	5,564.14	5,564.14	1.00
Ravalli .....	1,951.82	1,951.82	2,440.76	1.25
Teton .....	3,784.47	3,784.47	7,568.94	2.00
Totals.....	98,590.02	98,590.02	153,444.36	\$1.55

## CHARACTER OF NORMAL SCHOOL LANDS.

COUNTY.	Grazing.	Agricul- tural.	Timber.	M Feet Timber.	Value at \$2.00 Per M.
Beaverhead .....	18,713.57	.....	.....	.....	.....
Cascade .....	3,241.11	.....	.....	.....	.....
Choteau .....	15,671.25	.....	.....	.....	.....
Flathead .....	.....	109.98	23,460.37	52,770.00	\$105,540.00
Gallatin .....	6,311.90	720.00	.....	.....	.....
Lewis and Clarke .....	2,292.14	.....	.....	.....	.....
Madison .....	15,669.37	.....	.....	.....	.....
Meagher .....	1,120.00	.....	.....	.....	.....
Missoula .....	.....	.....	5,564.14	29,355.00	58,710.00
Ravalli .....	1,951.02	.....	.....	.....	.....
Teton .....	3,784.47	.....	.....	.....	.....
Totals .....	68,754.83	829.98	29,024.51	82,125.00	\$164,250.00

## STATUS OF THE REFORM SCHOOL GRANT.

Total grant .....	50,000.00 acres
Amount selected .....	49,817.27 acres
Amount approved .....	44,256.78 acres



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COUNTY.	Acres selected.	Appraised value.	Rate per acre.
Beaverhead .....	5,960.00	\$6,120.00	\$1.03
Carbon .....	3,849.93	7,699.86	2.00
Cascade .....	2,433.42	4,866.84	2.00
Choteau .....	2,495.19	4,990.38	2.00
Deer Lodge .....	8,175.57	9,201.05	1.10
Fergus.....	1,275.61	1,594.61	1.25
Flathead .....	4,438.91	4,572.73	1.03
Gallatin .....	642.32	642.32	1.00
Jefferson .....	2,853.37	2,853.37	1.00
Lewis and Clarke .....	1,160.00	2,320.00	2.00
Madison .....	5,810.35	7,262.35	1.25
Meagher .....	10,722.60	21,445.20	2.00
Totals.. .....	49,817.27	73,568.61	\$1.48

## CHARACTER OF REFORM SCHOOL LANDS.

COUNTY.	Grazing.	Agricul- tural.	Timber.	M feet timber.	Value at \$2.00 per M
Beaverhead .....	5,960.00	.....	.....	.....	.....
Carbon .....	3,849.93	.....	.....	.....	.....
Cascade .....	2,433.42	.....	.....	.....	.....
Choteau .....	2,495.19	.....	.....	.....	.....
Deer Lodge .....	4,023.57	.....	4,046.00	16,900.00	\$33,800.00
Fergus.....	1,275.51	.....	.....	.....	.....
Flathead.....	.....	.....	4,438.91	9,450.00	18,900.00
Gallatin .....	642.32	.....	.....	.....	.....
Jefferson .....	2,853.37	.....	.....	.....	.....
Lewis and Clarke .....	1,160.00	.....	.....	.....	.....
Madison .....	5,810.35	.....	.....	.....	.....
Meagher .....	10,722.60	.....	.....	.....	.....
Totals .....	41,230.25	.....	8,484.91	26,350.00	\$52,700.00

## STATUS OF THE CAPITOL BUILDING GRANT.

Total grant .....	182,000.00 acres
Amount selected .....	149,932.64 acres
Amount approved .....	118,257.01 acres

COUNTY.	Acres Selected.	Acres Appraised.	Appraised Value.	Rate Per Acre.
Beaverhead .....	6,761.09	6,761.09	\$8,451.36	\$1.25
Broadwater .....	15,589.02	15,589.02	25,721.83	1.65
Cascade .....	560.00	560.00	760.00	1.56
Choteau .....	6,077.42	6,077.42	12,154.84	2.00
Dawson .....	640.00	640.00	1,680.00	2.50
Deer Lodge .....	13,909.08	13,909.08	13,909.08	1.00
Flathead .....	35,223.07	34,228.43	37,651.27	1.10
Gallatin .....	14,626.40	14,626.40	25,567.20	1.70
Lewis and Clarke .....	6,964.90	6,964.90	12,188.56	1.75
Madison .....	19,845.00	19,945.00	22,931.70	1.15
Meagher .....	640.00	640.00	1,280.00	2.00
Missoula .....	19,558.19	19,558.19	19,558.19	1.00
Ravalli .....	6,718.47	6,718.47	6,921.32	1.03
Teton .....	2,720.00	2,720.00	5,440.00	2.00
Totals.. .....	149,932.64	149,028.00	193,135.40	\$1.30

## CHARACTER OF CAPITOL BUILDINGS LANDS.

COUNTY.	Grazing.	Agricul- tural.	Timber.	M feet saw timber.	Value at \$2.00.
Beaverhead .....	6,761.09	.....	.....	.....	.....
Broadwater .....	15,589.02	.....	.....	.....	.....
Cascade .....	400.00	160.00	.....	.....	.....
Choteau .....	6,077.42	.....	.....	.....	.....
Dawson .....	560.00	80.00	.....	.....	.....
Deer Lodge .....	2,589.08	480.00	10,840.00	40,825.00	\$81,750.00
Flathead .....	.....	160.00	34,068.43	126,280.00	252,560.00
Gallatin .....	14,466.40	160.00	.....	.....	.....
Lewis and Clarke .....	6,604.90	360.00	.....	.....	.....
Madison .....	19,285.00	160.00	.....	.....	.....
Meagher .....	640.00	.....	.....	.....	.....
Missoula .....	.....	.....	19,558.19	101,750.00	203,500.00
Ravalli .....	2,718.47	.....	4,000.00	12,830.00	25,660.00
Teton .....	2,000.00	720.00	.....	.....	.....
Totals .....	77,691.38	2,480.00	68,456.62	281,685.00	\$563,370.00

## STATUS OF THE UNIVERSITY GRANT.

Total grant ..... 46,080.48 acres  
All selected and patented to the State.

COUNTY.	Acres.	Appraised value.	Rate per acre.
Broadwater .....	640.00	1,600.00	\$2.50
Cascade .....	1,485.94	6,641.35	4.48
Custer .....	4,453.74	6,700.78	1.26
Deer Lodge .....	313.87	1,569.35	5.00
Fergus .....	13,731.72	20,800.00	1.51
Flathead .....	9,879.12	65,505.40	6.63
Gallatin .....	2,887.90	8,316.73	2.88
Granite .....	635.84	1,590.00	2.50
Jefferson .....	1,281.92	2,681.20	2.08
Lewis and Clarke .....	1,920.00	9,600.00	5.00
Madison .....	800.00	1,360.00	1.70
Meagher .....	4,147.68	8,295.36	2.00
Missoula .....	1,280.00	2,560.00	2.00
Park .....	957.45	3,040.00	3.17
Yellowstone .....	1,665.60	2,885.60	1.37
Totals.. .....	46,080.78	\$142,600.77	\$3.09

## CHARACTER OF UNIVERSITY LANDS.

COUNTY.	Grazing.	Agricul- tural.	Timber.	M feet timber.	Value at \$2.00 per M
Broadwater .....	640.00	.....	.....	.....	.....
Cascade .....	865.94	620.00	.....	.....	.....
Custer .....	3,849.05	604.69	.....	.....	.....
Deer Lodge .....	153.87	160.00	.....	.....	.....
Fergus .....	13,091.72	640.00	.....	.....	.....
Flathead .....	320.00	8,251.94	1,307.18	4,600.00	\$9,200.00
Gallatin .....	2,236.30	651.00	.....	.....	.....
Granite .....	395.84	240.00	.....	.....	.....
Jefferson .....	1,281.92	.....	.....	.....	.....
Lewis and Clarke .....	1,920.00	.....	.....	.....	.....
Madison .....	320.00	480.00	.....	.....	.....
Meagher .....	3,987.68	160.00	.....	.....	.....
Missoula .....	.....	.....	1,280.00	3,750.00	7,500.00
Park .....	477.45	480.00	.....	.....	.....
Yellowstone .....	1,655.60	.....	.....	.....	.....
Totals .....	31,217.32	12,286.63	1,587.18	8,350.00	\$16,700.00

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TABLE SHOWING THE AMOUNT OF SELECTED LANDS IN EACH COUNTY.

COUNTY.	Granted Lands.	Indemnity School Lands.	Totals.
Beaverhead .....	58,313.78	15,696.09	74,009.87
Broadwater .....	16,229.02	1,838.90	18,067.92
Carbon .....	7,747.86		7,747.86
Cascade .....	19,359.14	50,402.06	69,765.20
Choteau .....	66,403.78	138,890.03	205,293.81
Custer .....	4,453.74		4,453.74
Dawson .....	640.00		3,199.50
Deer Lodge .....	26,621.59	27,132.26	53,753.95
Fergus .....	15,007.33	69,859.46	84,866.79
Flathead .....	139,715.98		139,715.98
Gallatin .....	39,404.70	1,280.00	40,684.70
Granite .....	635.84		635.84
Jefferson .....	11,582.51		11,582.51
Lewis and Clarke .....	28,203.51	11,264.08	39,467.59
Madison .....	66,802.74	9,598.31	76,401.05
Meagher .....	42,075.68	3,362.28	45,437.96
Missoula .....	45,539.99		45,539.99
Park .....	957.45		957.45
Ravalli .....	17,710.29		17,710.29
Silver Bow .....		1,483.03	1,483.03
Sweet Grass .....	1,280.00	6,298.46	7,578.46
Teton .....	13,131.56	23,193.49	36,325.05
Valley .....			
Yellowstone .....	1,665.60	4,483.40	6,149.00
Totals .....	626,502.09	367,341.45	993,843.54
Amount of surveyed school lands .....		acres	1,800,893.36
Total amount of state lands .....		acres	2,794,736.90

## STATUS OF THE DEAF AND DUMB ASYLUM GRANT.

Total grant .....	50,000.00 acres
Amount selected .....	51,047.45 acres
Amount approved .....	44,777.43 acres

COUNTY.	Acres Selected.	Acres Appraised.	Appraised Value.	Rate Per Acre.
Beaverhead .....	6,840.00	6,840.00	\$6,840.00	\$1.00
Deer Lodge .....	1,520.00	1,520.00	2,350.00	1.54
Flathead .....	14,310.49	14,310.49	14,739.80	1.03
Gallatin .....	2,577.44	2,577.44	2,324.92	1.20
Lewis and Clarke .....	1,640.00	1,640.00	2,900.00	1.75
Madison .....	3,553.36	2,580.00	2,680.00	1.03
Meagher .....	12,964.40	12,964.40	25,928.20	2.00
Missoula .....	4,840.40	4,840.40	4,840.40	1.00
Totals .....	51,047.45	50,074.09	65,563.32	1.12

## CHARACTER OF DEAF AND DUMB ASYLUM LANDS.

COUNTY.	Grazing.	Agricultural.	Timber.	Amount Saw Timber.	Value at \$2.00 Per M.
Beaverhead .....	6,840.00				
Deer Lodge .....	540.00		980.00	1,040.00	\$2,080.00
Flathead .....			14,310.49	31,255.00	62,510.00
Gallatin .....	2,577.44				
Jefferson .....	2,801.36				
Lewis and Clarke .....	1,640.00				
Madison .....	3,553.36				
Meagher .....	12,964.40				
Missoula .....			4,840.40	15,835.00	31,670.00
Totals .....	30,916.56		20,130.89	48,135.00	\$96,260.00



## The United States Land Offices of Montana.

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The apportionment for the district of Montana out of the current appropriation made for surveying public lands for the fiscal year ending June 30th, 1900, was \$43,000. Under this apportionment eleven surveying contracts which practically absorbed the amount were let. During this fiscal year the Northern Pacific Railway company deposited for surveys \$12,220, but the surveys to be made under the deposit were delayed on account of a failure to comply with the regulations of the Interior department in the letting of the contracts. The same company made a further survey deposit of \$7,286.50.

The Surveyor General's annual report shows that during the year 4,554 miles of line were surveyed, as follows: Standard parallels, 68 miles; guide meridians, 75 miles; township lines, 651 lines; lines re-established, 80 miles; re-surveys, 63 miles; re-tracements, 68 miles; sub-divisions, 3,409 miles; meander lines, 142 miles.

The Surveyor General's report shows that after his report for the year ending June 30, 1899, was filed, and consequently not appearing therein, returns of 1,206 miles of surveys were made by deputy surveyors. During the year 10 exterior plats were made; 224 township plats were made; 108 books of field notes were examined. There was deposited during the year the sum of \$9,975 for office work on mineral surveys; 330 orders were issued for mineral surveys; 8 orders were issued for amended mineral surveys; 14 supplemental orders were issued for mineral surveys; 4 orders were issued for reports on placers; 304 surveys were examined and approved; 8 amended surveys were examined and approved; 4 reports on placers were examined and approved; 736 mineral plats were made; 225 transcripts were made of surveys and reports on placers; 298 surveys were platted on connected sheets, 10 surveys were re-platted on connected sheets; 28 new connected sheets were made; 2 connected sheets were re-platted; 20 United States deputy mineral surveyors were commissioned.

The Surveyor General estimates that \$50,000 will be required for surveys in Montana for the fiscal year ending June 30, 1902.

In support of his estimate he submits the following statement with reference to the demand for surveys within the state:

Conditions have not changed since my last report. The demand for surveys has not abated. Advices from all over the state indicate that there is a demand for homes by persons who are desirous of engaging in agricultural and pastoral pursuits. They prefer to settle on surveyed lands, when possible; but by reason of the fact that practically all such desirable land is appropriated, are compelled to settle upon unsurveyed lands, and then apply for the survey of the same, or, as many prospective settlers do, pass

through Montana and settle in other states having a larger proportion of surveyed land than this state has.

The survey between Montana and Idaho has been made and finally accepted, and the plats and notes are now on file in the office of the Surveyor General of the state.

Fort Ellis and Fort Maginnis have been abandoned, leaving the following military reservations existing within the state:

Camp Baker, in T. 11 N., R 4 E.....	2,400.00
Fort Keogh, at mouth of Tongue River.....	57,619.00
Fort Assinniboine, mostly between the Milk and Missouri rivers, and within the reservation for the Gros Ventre, Piegan and other Indians..	168,640.00
Fort Misoula:	
Original reserve: Sec. 31, T. 13 N., R 19 W.....	640.00
Additional reserve: S. $\frac{1}{2}$ NE. $\frac{1}{4}$ and SE $\frac{1}{4}$ sec. 25, T. 13 N., R. 20 W., the S. $\frac{1}{2}$ NE. $\frac{1}{4}$ , S $\frac{1}{2}$ NW. $\frac{1}{4}$ , SE. $\frac{1}{4}$ NE. $\frac{1}{4}$ of SW. $\frac{1}{4}$ , and W. $\frac{1}{2}$ of SW. $\frac{1}{4}$ , sec. 30, T. 13 N., R. 19 W..	560.23
Timber reserve on unsurveyed land.....	1,577.41
Fort Custer post reservation, 6 miles square, in Ts. 1 and 2 S., Rs. 33 and 34 E.	23,040.00
National cemetery of Custer's battlefield.....	640.00
Limestone reservation, near old Fort C. F. Smith .....	2,227.20
Total in Montana as far as known or estimated .....	257,343.84

The following approvals and certifications of lands, in aid of education, have been made in Montana: State charitable, penal and reformatory institutions, 1,275.61 acres; school of mines, 21,685.19 acres; deaf and dumb asylum, 1,175.81 acres; agricultural college, 37,867.60 acres; state normal school, 19,970.70 acres.

The following table gives the public and Indian lands of the state disposed of for cash and under the homestead acts, the timber culture acts, located with agricultural college and other kinds of scrip and military bounty warrants and selected by states and railroads, and the amounts of cash received on account of sales of public lands, by years, from 1888 to 1900, the fiscal years ending on the 30th of June:

Year.	Acres.	Year.	Cash Received.	Year.	Acres.	Year.	Cash Received.
1888 .....	282,597.04	1888.....	\$166,204.12	1895 .....	418,302.54	1895.....	\$124,736.15
1889 .....	462,428.67	1889.....	269,626.07	1896 .....	683,617.00	1896.....	150,006.74
1890 .....	481,816.70	1890.....	269,735.43	1897 .....	341,229.56	1897.....	107,295.89
1891 .....	522,980.35	1891.....	230,599.77	1898 .....	669,798.32	1898.....	187,483.71
1892 .....	587,262.21	1892.....	258,367.22	1899 .....	889,894.50	1899.....	195,638.23
1893 .....	631,868.53	1893.....	267,344.91	1900 .....	1,158,294.47	1900.....	359,506.95
1894 .....	326,629.85	1894.....	127,590.35	Total....	7,465,719.70		2,714,145.54

This shows the appropriations made during the last fiscal year to be very nearly double those made in the state rating next to Montana, and the cash income, which is exclusive of the land office fees, shows nearly the same proportionate contract. The amounts accrued and paid to Montana on account of the grants of 2, 3 and 5 per cent. of the net proceeds of the sales of public lands, amounted in 1899 to \$9,006.62, and the total income of this nature up to and including the close of this fiscal year has been \$83,508.34.

The following table gives the unappropriated areas in the several land districts and counties of the state, together with their general classification:

Land District.	County.	Area unappropriated and unreserved.			Area reserved.	Area appropriated.	Total area of land surface of the county in land district.	Brief description of character of unappropriated and unreserved land.
		Surveyed.	Unsurveyed.	Total.				
Bozeman		Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	
		38,719	32,000	70,719		65,281	136,000	Principally arid.
		383,530	991,196	1,374,726		150,274	1,625,000	One-third good farming land, two-thirds mountainous.
					312,000		312,000	No vacant public land.
		49,025	503,528	552,553		1,034,447	1,597,000	One-fourth good farm land, three-fourths mountainous.
		47,816	28,000	75,816		71,184	147,000	Principally arid.
		382,584	644,040	1,026,624		262,416	1,289,040	One-fourth arid, three-fourths mountainous.
		188,931	1,118,501	1,307,432		420,568	1,728,000	One-third good farm land, two-thirds arid and mountainous.
		253,686	839,957	1,093,643		415,357	1,515,000	Grazing and mountainous.
		196,968	183,054	380,022		756,978	1,137,000	Arid and mountainous.
		1,527,259	4,350,276	5,877,535	312,000	3,176,505	9,366,400	
Helena		321,107	1,508,600	1,829,707	2,800	310,493	2,143,000	Mountainous and grazing.
		170,488	309,360	479,848		160,132	640,000	Mountainous and agricultural.
		724,955	425,722	1,150,677	47,520	947,803	2,146,000	Grazing and Agricultural.
		5,127,930	2,914,929	8,042,859	790,250	887,391	9,720,500	Grazing and Agricultural.
		130,165	580,124	710,289		771,711	1,482,000	Mountainous, some agricultural.
		10,962	14,038	25,000			25,000	Grazing.
			226,000	226,000			226,000	Valleys, mountains, timber, grazing.
		9,400	46,840	56,240		6,760	62,000	Mountainous.
		113,617	345,000	458,617		43,383	502,000	Mountainous.
		75,830	654,830	730,660		156,840	887,500	Mountainous, grazing, agricultural.
		851,744	1,326,704	2,178,448		558,052	2,736,500	Mountainous, grazing, agricultural.
		287,620	980,460	1,278,080	20,550	569,370	1,695,000	Mountainous, grazing, agricultural.
		290,504	818,883	1,109,387	2,840	559,273	1,671,500	Mountainous, grazing, agricultural.
		2,200	46,300	48,500		9,500	58,000	Mountainous, grazing, agricultural.
		170,619	369,040	539,659		107,341	647,000	Mountainous, grazing, agricultural.
		4,480	31,520	36,000		10,000	46,000	Mountainous, grazing, agricultural.
		1,206,727	1,180,187	2,386,914	1,487,000	493,686	4,367,500	Mountainous, grazing, agricultural.
		9,508,348	11,778,537	21,286,885	2,350,960	5,317,655	28,955,500	
Kalispell		522,346	3,731,136	4,253,482	386,000	925,518	5,565,000	Valleys, mountains, timber, grazing.
			91,000	91,000			91,000	Timbered valleys and mountains.



Land Districts.	County.	Area unappropriated and unreserved.			Area reserved.	Area appropriated.	Total area of land surface of the county in land district.	Brief description of character of unappropriated and unreserved land.
		Surveyed.	Unsurveyed.	Total.				
Lewistown .....	Teton .....	.....	4,462,636	4,984,982	456,000	925,518	6,386,500	Subject to location and entry under the mineral laws only.
	Total .....	522,346	4,462,636	4,984,982	456,000	925,518	6,386,500	
	Choteau .....	9,576	173,739	183,315	.....	3,685	187,000	Broken grazing.
	Custer .....	34,965	292,384	227,349	1,280	13,871	252,500	Broken grazing.
	Dawson .....	234,109	416,893	651,002	15,300	48,138	714,500	Broken grazing.
	Fergus .....	2,400,859	2,106,825	4,507,684	143,011	1,062,305	5,713,000	Grazing, farming, timber and mountains.
Miles City .....	Meagher .....	288,592	69,742	358,334	39,187	210,479	608,000	Farming and grazing.
	Sweet Grass .....	114,211	56,552	170,763	15,360	149,877	336,000	Farming and grazing.
	Yellowstone .....	200,641	144,797	345,438	24,320	190,242	500,000	Grazing.
	Total .....	3,282,953	3,170,922	6,453,885	238,518	1,678,597	8,371,000	
	Carbon .....	.....	70,000	70,000	.....	.....	70,000	Mountainous.
	Choteau .....	113,940	304,580	418,520	.....	7,980	426,500	Agricultural and grazing.
Missoula .....	Crow Reservation .....	.....	.....	.....	3,066,000	.....	3,066,000	No vacant public land.
	Custer .....	1,671,851	8,563,060	10,240,911	546,400	1,281,689	12,063,000	Grazing and Agricultural.
	Dawson .....	293,811	6,773,700	7,067,511	155,200	485,849	7,703,500	Grazing and Agricultural.
	Valley .....	1,322,138	4,706,750	6,028,888	2,361,920	59,192	8,450,000	Grazing and Agricultural.
	Yellowstone .....	141,420	456,500	597,920	.....	58,080	656,000	Grazing and Agricultural.
	Total .....	3,543,169	20,880,590	24,423,759	6,129,520	1,892,790	32,446,000	
Silver Bow .....	Beaverhead .....	5,652	603,267	608,919	.....	146,081	755,000	Arid and grazing.
	Deer Lodge .....	21,686	19,320	41,006	.....	26,494	67,500	Mountains, timber, grazing and mineral
	Flathead .....	.....	46,000	46,000	.....	.....	16,000	Small valleys, mountains, timber, grazing
	Granite .....	14,784	469,928	484,712	.....	19,288	504,000	Mountains, timber, minerals, timber and grazing.
	Missoula .....	87,728	2,939,023	3,026,751	1,333,333	582,916	4,943,000	Small valleys, mountains, timber and grazing.
	Ravalli .....	32,226	716,902	749,122	691,200	353,168	1,793,500	Small valleys, mountains, timber and grazing.
Total in Montana .....	Silver Bow .....	.....	9,500	9,500	.....	.....	9,500	Mountainous.
	Total .....	162,080	4,773,940	4,936,020	2,024,523	1,127,947	8,088,500	
	Total in Montana .....	18,546,146	49,416,911	67,963,057	11,511,531	14,119,012	93,593,600	

## BUSINESS TRANSACTED AT THE LOCAL LAND OFFICES.

(Note.—The area in parenthesis is not included in the aggregate, being accounted for in the original entries.)

## BOZEMAN.

Class of Entry.	No.	Acres.	Commis- sions.	Fees.	Amount.
Sales of land at public auction .....	1	40.00	.....	.....	\$100.00
Sales of timber and stone lands .....	1	40.00	.....	.....	\$100.00
Sales of mineral lands .....	21	1,554.28	.....	.....	5,255.00
Sales of coal lands .....	13	2,761.68	.....	.....	55,233.60
Sales of Crow Indian lands .....	8	(1,275.64)	.....	.....	1,913.46
Excess payments on homestead, timber- culture, and other entries and locations.	41	214.95	.....	.....	537.32
Original entries under the desert-land act	118	15,681.31	.....	.....	3,920.37
Final entries under the desert-land act..	49	(7,216.67)	.....	.....	7,216.67
Sales under act March " 1887 .....	1	80.00	.....	.....	200.00
Homestead entries commuted to cash under section 2301, R. S. ....	5	(240.54)	.....	.....	601.35
Total cash sales .....	256	20,372.22	.....	.....	75,077.77
Original homestead entries .....	418	61,216.01	\$4,495.87	\$3,975.00	8,470.87
Final homestead entries .....	116	(16,894.79)	1,252.61	.....	1,252.61
Final entries under the timber-culture laws .....	5	(785.57)	.....	20.00	20.00
Lands selected under grants to railroads	20	3,117.47	.....	40.00	40.00
State selections .....	58	8,964.31	.....	116.00	116.00
Applications to purchase					
Mineral lands .....	29	.....	.....	290.00	290.00
Coal lands .....	47	.....	.....	141.00	141.00
Timber and stone lands .....	1	.....	.....	10.00	10.00
Mineral protests, adverse claims .....	3	.....	.....	30.00	30.00
Cancellation fees .....	.....	.....	.....	3.00	3.00
Amount received for reducing testimony to writing .....	.....	.....	.....	376.13	376.13
Total of all classes of entries and amount received therefrom.....	953	93,670.01	5,748.48	5,001.13	85,827.38
Salaries, fees, and commissions of regis- ter and receiver .....	.....	.....	.....	.....	6,000.00
Incidental expenses .....	.....	.....	.....	.....	1,403.32
Expenses of depositing public money.....	.....	.....	.....	.....	28.70
Total.....	.....	.....	.....	.....	7,432.02

## HELENA.

Sales of land subject to pre-emptory entry	6	891.07	.....	.....	\$1,113.84
Sales of land at public auction .....	37	2,622.56	.....	.....	3,804.92
Sales of timber and stone lands .....	57	8,287.64	.....	.....	20,719.14
Sales of mineral lands .....	122	3,974.11	.....	.....	14,722.50
Excess payments on homestead, timber- culture, and other entries and locations.	85	328.91	.....	.....	418.43
Original entries under the desert-land act	987	182,544.98	.....	.....	45,636.63
Final entries under the desert-land act..	213	(32,667.44)	.....	.....	32,667.44
Cash payment on scrip location .....	2	(99.45)	.....	.....	124.31
Homestead entries commuted to cash under section 2301, R. S. ....	96	(14,854.16)	.....	.....	18,967.73
Total cash sales .....	1605	198,649.27	.....	.....	138,174.94
Original homestead entries .....	1077	158,293.49	\$6,696.78	\$10,155.00	16,851.78
Final homestead entries .....	459	(62,513.17)	2,727.46	.....	2,727.46
Final entries under the timber-culture laws .....	19	(2,592.74)	.....	76.00	76.00
Lands entered with private-land scrip ..	5	(459.36)	.....	.....	.....
Cancellation fees .....	.....	.....	.....	47.00	47.00
Lands selected under grants to railroads	262	41,428.04	.....	524.00	524.00
State selections .....	1283	203,501.12	.....	2,586.00	2,586.00
Indian allotment .....	1	160.00	.....	.....	.....
Applications to purchase					
Mineral lands .....	160	.....	.....	1,600.00	1,600.00
Coal lands .....	27	.....	.....	81.00	81.00
Coal lands .....	57	.....	.....	570.00	570.00
Reservoir filings .....	38	.....	.....	114.00	114.00

## SEVENTH ANNUAL REPORT OF BUREAU

Class of Entry.	No.	Acres.	Commissions.	Fees.	Amount.
Mineral protests, adverse claims .....	12	.....	.....	120.00	120.00
Pre-emption declaratory statements .....	7	.....	.....	21.00	21.00
Soldiers' and sailors' homestead declaratory statements .....	2	.....	.....	6.00	6.00
Amount received for reducing testimony to writing .....	.....	.....	.....	600.91	600.91
Total of all classes of entries and amount received therefrom.....	5014	602,031.82	9,424.24	16,480.91	164,080.09
Salaries, fees, and commissions of register and receiver.. ..	.....	.....	.....	.....	6,000.00
Incidental expenses .....	.....	.....	.....	.....	3,371.28
Total.....	.....	.....	.....	.....	9,371.28

## KALISPELL.

Sales of timber and stone lands .....	50	7,088.38	.....	.....	\$17,720.99
Sales of mineral lands .....	1	15.61	.....	.....	80.00
Excess payments on homestead, timber-culture, and other entries and locations.	15	79.85	.....	.....	108.16
Original entries under the desert-land act	7	821.03	.....	.....	205.26
Final entries under the desert-land act..	2	(160.00)	.....	.....	160.00
Homestead entries commuted to cash under section 2301, R. S.....	15	(1,835.68)	.....	.....	2,677.18
Total cash sales .....	90	8,004.87	.....	.....	20,951.59
Original homestead entries .....	150	21,096.12	\$999.50	\$1,375.00	2,374.50
Final homestead entries .....	85	(11,721.16)	518.36	.....	518.36
Lands selected under grants to railroads	671	106,740.50	.....	1,342.00	1,342.00
Applications to purchase timber and stone lands .....	50	.....	.....	500.00	500.00
Cancellation fees .....	.....	.....	.....	2.00	2.00
Amount received for reducing testimony to writing .....	.....	.....	.....	389.20	389.20
Total of all classes of entries and amount received therefrom.....	1046	135,841.49	1,517.86	3,608.20	26,077.65
Salaries, fees, and commissions of register and receiver.. ..	.....	.....	.....	.....	5,170.06
Incidental expenses .....	.....	.....	.....	.....	1,468.14
Total.....	.....	.....	.....	.....	6,638.20

## LEWISTOWN.

Sales of land at public auction .....	5	360.00	.....	.....	\$690.00
Sales of timber and stone lands .....	8	833.14	.....	.....	2,082.85
Sales of mineral lands .....	16	204.00	.....	.....	1,075.00
Cash installments on abandoned military reservation (act of Aug. 23, 1894) .....	.....	.....	.....	.....	117.82
Homestead entries commuted to cash under section 2301, R. S.....	12	29.41	.....	.....	38.05
Final entries under the desert-land act..	273	45,668.01	.....	.....	11,417.07
Final entries under the desert-land act..	101	(13,561.67)	.....	.....	13,561.67
Homestead entries commuted to cash under section 2301, R. S.....	78	(12,251.02)	.....	.....	15,305.91
Total cash sales .....	493	47,094.56	.....	.....	44,288.37
Original homestead entries .....	307	45,818.35	\$1,798.67	\$2,940.00	4,738.67
Final homestead entries .....	113	(15,629.34)	624.95	.....	624.95
Final entries under the timber-culture laws.....	6	(683.65)	.....	24.00	24.00
State selections .....	504	80,533.12	.....	1,005.00	1,008.00
Applications to purchase	.....	.....	.....	.....	.....
Mineral lands .....	14	.....	.....	140.00	140.00
Coal lands .....	12	.....	.....	36.00	36.00
Timber and stone lands .....	8	.....	.....	80.00	80.00
Cancellation fees .....	.....	.....	.....	4.00	4.00
Townsite filings .....	1	.....	.....	3.00	3.00



Class of Entry.	No.	Acres.	Commis- sions.	Fees.	Amount.
Amount received for reducing testimony to writing .....	...	.....	.....	644.32	644.32
Total of all classes of entries and amount received therefrom.....	1458	173,496.03	2,423.62	4,879.32	51,591.31
Salaries, fees, and commissions of register and receiver.. ..	...	.....	.....	.....	6,000.00
Incidental expenses .....	...	.....	.....	.....	328.15
Total.....	.....	.....	.....	.....	6,328.15

## MILES CITY.

Sales of land at public auction .....	1	13.57	.....	.....	\$33.93
Excess payments on homestead, timber-culture, and other entries and locations.	15	48.81	.....	.....	62.63
Original entries under the desert-land act	118	23,014.07	.....	.....	5,753.50
Final entries under the desert-land act..	27	(4,786.48)	.....	.....	4,786.48
Homestead entries commuted to cash under section 2301, R. S.....	4	(584.07)	.....	.....	871.50
Total cash sales .....	165	23,076.45	.....	.....	11,508.04
Original homestead entries .....	177	27,479.41	\$1,343.01	\$1,720.00	3,063.01
Final homestead entries .....	43	6,708.78	380.38	.....	380.38
Final entries under the timber-culture laws.....	2	(320.00)	.....	8.00	8.00
Lands selected under grants to railroads	3	309.55	.....	6.00	6.00
State selections .....	16	2,559.56	.....	32.00	32.00
Applications to purchase coal lands .....	2	.....	.....	6.00	6.00
Reservoir filings .....	4	.....	.....	12.00	12.00
Cancellation fees .....	.....	.....	.....	1.00	1.00
Amount received for reducing testimony to writing .....	.....	.....	.....	163.69	163.69
Total of all classes of entries and amount received therefrom.....	412	53,424.97	1,723.39	1,948.69	15,180.12
Salaries, fees, and commissions of register and receiver.. ..	.....	.....	.....	.....	3,182.22
Incidental expenses .....	.....	.....	.....	.....	495.23
Expenses of depositing public money.....	.....	.....	.....	.....	6.90
Total.....	.....	.....	.....	.....	3,684.35

## MISSOULA.

Sales of land subject to pre-emptory entry	56	7,321.40	.....	.....	\$9,151.71
Sales of timber and stone lands .....	143	19,727.55	.....	.....	49,318.86
Sales of mineral lands .....	9	144.40	.....	.....	622.50
Excess payments on homestead, timber-culture, and other entries and locations.	13	88.54	.....	.....	138.07
Original entries under the desert-land act	75	16,834.87	.....	.....	4,208.72
Final entries under desert-land act .....	16	(3,477.47)	.....	.....	3,477.47
Homestead entries commuted to cash under Sec. 2301, R. S.....	14	(1,692.33)	.....	.....	2,588.91
Total cash sales .....	327	44,116.76	.....	.....	69,506.24
Original homestead entries .....	101	14,534.34	\$797.24	\$940.00	1,737.24
Final homestead entries .....	89	(12,673.99)	730.73	.....	730.73
Lands selected under grants to railroads	241	37,883.46	.....	484.00	484.00
State selections .....	14	2,090.10	.....	28.00	28.00
Applications to purchase	.....	.....	.....	.....	.....
Mineral lands .....	11	.....	.....	110.00	110.00
Timber and stone lands .....	143	.....	.....	1,430.00	1,430.00
Mineral protests, adverse claims .....	3	.....	.....	30.00	30.00
Pre-emptory declaratory statements .....	159	.....	.....	477.00	477.00
Cancellation fees .....	.....	.....	.....	4.00	4.00
Amount received for reducing testimony	.....	.....	.....	.....	.....

Class of Entry.	No.	Acres.	Commissions.	Fees.	Amount.
to writing .....				598.44	598.44
Total of all classes of entries and amount received therefrom.....	1088	98,624.66	1,527.97	4,101.44	75,135.65
Salaries, fees, and commissions of register and receiver.....					6,000.00
Incidental expenses .....					1,136.07
Expenses of depositing public money.....					79.95
Total.....					7,216.02
Flathead and other Indians (Bitter Root Valley:)					
Full Payments .....	4	314.41			3,789.31
First Payments .....	10	891.08			3,490.58
Second Payments .....	2	(150.00)			224.01
Final Payments .....	2	(160.00)			224.01
Interest Payments .....					28.02
Total .....	14	1,205.49			8,545.25

The local land offices of the state were created by Congressional act or execution order, and opened on the following respective dates:

Bozeman .....	June 20, 1874	Oct. 5, 1874
Helena .....	Mar. 2, 1867	Apr. 27, 1867
Kalispell .....	Mar. 2, 1897	July 1, 1897
Lewistown .....	Apr. 1, 1890	Nov. 26, 1890
Miles City .....	Apr. 30, 1880	Oct. 19, 1880
Missoula .....	Apr. 1, 1890	Apr. -9, 1891

The total land area of Montana is 146,240 square miles, or 93,593,600 acres, and the water area is 821 square miles, or 525,440 acres, or a total area for the state of 147,061 square miles, or 94,119,040 acres. There are but two states in the Union—California and Texas—that are larger than Montana. The state is nearly as large as the Philippine islands, Hawaiian islands, Porto Rico, Pine island, Guam and the Tutuila group of the Samoan islands—the recent acquisitions—all added together.

## Water Supply of Montana

### For the Season of 1900.

Montana is drained by three large rivers, the Missouri and Yellowstone on the east, and Clarke's Fork of the Columbia river on the west side of the Rocky Mountains. All the tributaries of these three rivers rise in the mountains, and derive their water supply from the melting snow that has been stored there during the winter and spring months. By having a knowledge of the depth, character and distribution of the snow that has accumulated during the months of January, February and March, a reliable general forecast of the water supply for the ensuing season can be made for the different streams of the state. There is one element that enters into the forecast that

cannot at present be foreseen, and that is, a knowledge of temperature. This however, affects the water flow only in the early spring, commonly known as "spring freshets," and occurs in April, May or June.

In the mountains of Montana there are hundreds of canyons and ravines where the sun shines but little, if any, during the day. These deep ravines are the storage places of the water supply. This is an example of Nature's economical distribution of her supplies for man's use. High winds drift the snow into these storage places to a great depth, where, by its own weight, aided by the changes in temperature, it gradually solidifies, in which condition it loses little from evaporation and yields its moisture but slowly and during a comparatively long period during the later spring and early summer. Drifts are also formed at the bases of precipitous cliffs, which if located on the northern slope of the mountains or hills remain until May or June before they entirely disappear, and greatly assist in maintaining a steady flow of water in springs and small streams.

The volume of water in the mountain streams and creeks during the spring freshets that come with the first warm weather of April or May, depends on the depths of snow in the valleys and the foot hills. The high water in the large rivers occurring during the first protracted warm weather in May or June is determined by the depth of accumulated snow in the mountains both above and below the timber line. The drifts in the ravines and canyons remain to furnish the steady flow to the streams during the summer months. The temperature and weather are important factors in the spring freshets and floods. Continued warm weather and warm rains greatly augment the flood stages while warm weather followed by a sudden fall in temperature will greatly lessen the chances of floods, as the slush snow, being frozen, melts more slowly afterwards.

At the beginning of the year 1900, the Montana section of the climate and crop service published, by direction of the chief of the weather bureau, three special snow bulletins, dated January 31st, February 28th, and March 31st. These special bulletins were made up of reports received from two hundred and ninety-four correspondents situated in every portion of the state.

The snow bulletins were of great importance to the mining, stock, and agriculture interests.

The meteorological conditions during the time covered by the snow bulletins and weekly crop bulletins, show the highest mean temperature on record for January and March, and an excess in temperature for January, March, April, May and June; and a deficiency during February, August and September. The precipitation was deficient for January, February, June and July; while an excess is recorded for March, April, May, August and September. The greatest departures from the normal precipitation being a deficiency of 1.89 inches for June, and an excess of 1.15 inches for April. The rainy season occurred in April of this year, instead of the later part of May or in June as it commonly does.

The importance of having accurate reports of the depth of snow on the mountains is very emphatic, as the observations taken by voluntary observers in the valleys does not give all the facts necessary for the intelligent preparation of a seasonal forecast of the water supply for a given section.

E. J. GLASS,

Section Director, Montana Section.

Helena, Montana, November 12th, 1900.



## MAXIMUM TEMPERATURE

STATIONS.	January.		February.		March.		Max.
	Max.	Date.	Max.	Date.	Max.	Date.	
Adel .....	58	18	45	21	64	10, 11	70
Augusta.....							
Big Timber .....							79
Billings .....	55	24	50	2, 14, 18	73	13	77
Boulder .....	47	19	50	21, 24	64	31	75
Agricultural College Bozeman .....	49	13	46	22	66	11	70
Butte .....	47	19	46	24	61	10, 11	68
Canyon Ferry .....	48	13	50	21	68	11	80
Chester.....							
Chinook .....	62	18	50	28	63	11	78
Clemons .....	60	18	50	23	65	31	71
Columbia Falls .....	47	18	47	28	63	11	75
Corvallis .....	55	19	64	25	74	11	74
Crow Agency .....	54	23	52	6, 28	75	11	79
Culbertson .....							
Deer Lodge .....	60	22	48	25			
Dell .....	47	13	45	21	63	31	69
Dillon .....	58	8	56	20	66	11	71
Dupuyer .....					66	11	
Ekalaka .....	55	23	43	22	69	11	86
Fort Benton .....	68	18	60	26			
Fort Logan .....	52	13	47	18	64	10	80
Glasgow .....	49	21	46	28	69	11	81
Glendive .....	61	19	48	28	70	11	88
Glenwood .....	52	18	45	21, 24, 28	67	31	94
Great Falls .....	60	18	48	28	68	11	76
Harlem .....	60	7	56	28			
Havre .....	61	18	49	28	69	11	74
Helena .....	51	13	52	21	69	11	72
Kalispell .....	49	13	46	28	64	11	75
Kipp .....	56	18	48	25	63	11	73
Lewistown .....			48	28	70	11	76
Livingston .....	60	14	47	11, 25	63	12	
Manhattan .....	51	13	51	22	65	22, 23	75
Martinsdale .....	54	18	47	21	70	11, 22	74
Marysville .....	47	19	42	20, 21, 24	60	11	68
Miles City .....	60	19	50	28	74	11	84
Missoula .....	46	19	45	10, 20, 25	72	11	78
Ovando .....	42	6, 19	43	28	67	31	73
Parrot .....	51	19	52	2	65	22	74
Plains .....	48	19	47	27	65	11	73
Poplar .....	50	19	45	20	68	11	80
Red Lodge .....	50	13, 20	52	22	58	11, 12	68
Ridge .....	56	23	18	18	63	22, 23	85
Ridgelawn .....							
St. Paul's .....			48	28	68	11	
Troy .....	50	6, 13, 19	53	25	69	16, 17	85
Twin Bridges .....	52	12, 19	53	26	66	11	72
Utica .....	62	19	48	18	70	23	80
Wibaux .....	55	22	45	6			85
Yale .....	58	19	46	1, 3, 19	67	12	74
Fort Yellowstone .....	37	13	33	2	58	22, 31	66
Lowell, Wyoming.....	48	13	47	22	70	11	83
Parkman, Wyoming .....			52	22	73	11	74
Sheridan, Wyoming .....	53	23	50	6	73	10	80
Williston, N. D.....	53	19	43	28	68	11	84
Spokane .....			51	22	69	31	80

## RE AND DATA FOR 1900.

April.	May.	June.	July.	August.	Sept.	October.	Nov.	Dec.
Date.....	Max. Date.....	Max. Date.....	Max. Date.....	Max. Date.....	Max. Date.....	Max. Date.....	Max. Date.....	Max. Date.....
18, 19	79	10, 26	97	21	94	31	58	7
19							70	17
2, 20				110	31	104		60
19	82	10	96	21	96	31	93	2
6	82	26	95	21	96	31	89	1
18	76	10, 26	94	21	90	31	89	1
19	87	26	103	21	102	31	99	1
22	97		104	21	103	31	98	1
1, 6	76	5, 7	97	21	104	31	104	1
30	80	10	92	23	95	30	85	20
6	19	84	12	96	20	100	30	101
22	93	10	101	22	101	31	99	1
1, 19	80	26	96	21	98	31	93	1
20, 21	82	26	94	21	91	31	94	1
20	88	9, 12	104	22	100	31	90	1
20	98	27	100	24	106	31		99
6	98	10	108	21	104	11, 15,	31	104
19	97	11	97	21	95	11	90	1
20	100	11	109	22	113	31	104	1
6, 19	84	10	101	21	100	31	96	11
19	86	26	102	21	97	25	96	1
30	92	26	108	21	99	31	101	1
19	83	10	102	21	97	31	94	1
30	79	11	92	23	92	24	90	1
1	78	11	91	21	92	31	93	1
19	89	26	105	21	105	31	95	1
21	88	7	98	21	98	13, 25	90	1
2	85	9, 11,	26	104	21	102	31	95
20	86	23	96	21	95	31	90	1
20	96	26	106	21	87	31	106	1
1, 6	88	10	94	21				89
6	82	10	92	21	96	31	91	1
19	85	26	99	21	102	31	96	1
30	82	10	90	21, 22	95	22	87	21, 25
20, 22	97	26	105	21, 23,	24	108	31	105
6, 20, 21	77	10	110	25	93	12	96	1
20	98	27	103	24	105	12,	31	104
102		27	104	24	108	31	109	1
102		102		21	98	31	98	1
30	85	3	91	20	96	24	89	1
19	84	26	96	21, 22	98	31	94	1
6	88	12	108	21	98	10	100	1
21	96	27	102	24, 25	109	31	109	1
7	85	27	102	23	97	31	102	1
21	77	26	92	21	93	31	93	2
19	97	10	105	25	103	31	99	1
19, 20	87	26	99	21	103	31	102	1
20	91	10, 27	98	25	102	31	100	1
20	101	27	102	22	102	31	104	1
30	82	3	93	20	100	24	88	20

## MINIMUM TEMPERATURE

STATIONS.	January.		February.		March.		April.		May.	
	Min.	Date.	Min.	Date.	Min.	Date.	Min.	Date.	Min.	Date.
Adel .....	-17	28	-43	15	-16	6	20	17	24	27
Augusta .....										
Big Timber .....							21	12		
Billings .....	-11	1	-20	16	-2	4	29	12		
Boulder .....	-7	28	-28	16	-14	6	19	12	29	2
Agri. College Bozeman.	31	28	-24	16	-2	5	26	8	32	13
Butte .....	0	28	-18	16	1	5	24	8	33	13, 25
Canyon Ferry .....	-7	1	-25	16	0	5	26	12	35	13
Chester .....										
Chinook .....	-17	27	-34	7	-15	5	21	16	34	1
Clemons .....	-9	1	-27	14	-8	4, 5	25	7, 9, 12	28	22
Columbia Falls .....	5	28	-16	16	6	5	25	23	28	25
Corvallis .....	5	29	-26	16	17	5	27	4	31	24
Crow Agency .....	-13	1	-27	16	-3	6	22	11, 12, 17	34	2, 3, 15
Culbertson .....										
Deer Lodge .....	-2	28	-27	16						
Dell .....	13	28	-31	16	-1	6	21	8	28	18, 23, 29
Dillon .....	-8	28	-30	16	-8	6	25	8	30	1
Dupuyer .....					-13	5			29	28
Ekalaka .....	-18	28	-26	15	-11	6	16	2	28	2
Fort Benton .....	-9	27	-18	8, 15					35	2, 3
Fort Logan .....	-12	1	-29	15, 16	-14	6	18	12	29	16, 23
Glasgow .....	-20	28	-38	8	-25	6	18	17	24	2
Glendive .....	-13	26	-25	8	-17	5	23	10	33	2
Glenwood .....	-4	28	-30	15	-6	4	24	8, 17	27	23
Great Falls .....	-10	1	-24	15	-6	6	29	12	40	19
Harlem .....	-25	28	-37	7						
Havre .....	-15	28	-37	8	-15	6	20	17	35	2
Helena .....	1	1	-23	16	-4	5	30	12	38	12
Kalispell .....	4	28	-19	15	8	5	26	8	32	23
Kipp .....	-20	1	-31	15	-19	6	17	12	27	28
Lewistown .....			-30	15	-10	6	18	11	27	23
Livingston .....					-4	5			36	15, 19
Manhattan .....	-9	28	-30	16	-17	6	20	12	31	14, 15
Martinsdale .....	0	1	-30	15	-8	5	24	12	32	15
Marysville .....	-2	28	-27	15	-10	3, 4	23	8	32	12, 22
Miles City .....	-12	28	-16	17	11	6	24	12	36	2
Missoula .....	6	28	-8	15	12	5, 6	29	8, 23	36	12, 13, 23, 28
Ovando .....	-17	27	-35	15	-5	5	21	4	25	22
Parrot .....	1	28	-19	16	1	5	26	9	35	15
Plains .....	6	28	-16	16	16	5	24	8	30	23
Poplar .....	-17	28	-34	8	-19	6	19	17	29	2
Red Lodge .....	-15	28	-32	15	-10	5	18	12	30	14
Ridge .....	-17	28	-25	15	-9	6	17	12	31	2
Ridgellawn .....									33	16
St. Pauls .....			-30	15	-10	5				
Troy .....	7	28	-8	15	16	5	27	24	30	25
Twin Bridges .....	-6	28	-22	15	-10	5	26	4, 7, 16	29	22
Utica .....	-12	28	-31	15	-12	6	22	17	26	23
Wibaux .....	-18	28	-29	8			26	2	30	1
Yale .....	-11	28	-21	15	-5	5, 6	21	13	31	15
Fort Yellowstone .....	-12	28	-25	16	-4	5	21	11	30	2
Lovell, Wyo. ....	-14	28	-32	16	-2	6	21	1	31	14
Parkman, Wyo. ....			-35	15	-5	6	17	11	32	19
Sheridan, Wyo. ....	-14	2	-30	15	-1	6				
Williston, N. D. ....	-21	28	-36	9	-15	6	21	12	29	16
Spokane, Wash. ....	15	28	1	15	25	5	28	9	37	31



AND DATE FOR 1900.

June.		July.		August.		September.		October.		November.		December.	
Min.....	Date.....	Min.....	Date.....	Min.....	Date.....	Min.....	Date.....	Min.....	Date.....	Min.....	Date.....	Min.....	Date.....
25	10	30	2									-21	30
										18	27	-28	19
												-5	30
		38	19	42	26	21	25						
32	10	31	1	30	27	9	25	14	27	-22	20	-17	31
34	10	36	7	37	23	19	27	22	23	-18	20	-19	31
38	10	35	1	42	12, 20	20	26	25	27	-10	20	-11	31
40	1, 10	40	1	40	27	19	26	31	6, 12				
				47	27	27	25	26	26, 28	-33	20	-12	31
38	9	46	1, 2, 13	32	26	20	25						
31	8							14	27	-28	20	-10	30
34	10	38	13	31	2, 17	23	26, 27	18	27	-15	23	-7	31
36	2, 8	39	6, 19	32	23, 24	30	18, 27	20	27	-22	21	0	31
40	10	40	19	43	18	20	26	19	31	-7	19	-13	31
												-13	31
31	10	32	7, 8	34	27	13	27	15	23, 30	-20	20	-20	31
35	1, 10	32	7	34	9	12	25	20	24, 30	-20	19	-15	31
33	10	35	13	15	25								
35	10	40	13			25	26, 27	24	24	-7	20		
48	11	44	1	40	26								
30	10	35	2	31	27	14	23	23	24	-20	21	-13	13
40	1	42	10, 11, 28	41	4, 29	30	23	26	28	-25	22	-19	30, 31
40	9	43	19	40	26	22	26	23	30	-20	20	-14	31
31	10	32	1	35	23	13	27	23	23	-21	20	-15	31
40	1	46	1	38	26	22	26	28	24	-19	20	3	30
37	1	44	14	36	27	19	26	23	24	-30	20	-4	30
39	1	40	1	42	27	20	26	28	25	-17	20	-8	31
36	10	38	3	36	27	24	26	22	27	-12	21	-10	31
29	13	35	3	27	27	15	26	5	4, 6	-21	21	-5	-30
30	10	36	2, 18, 20	30	27	9	26	18	31	-25	20	-10	30
40	1	41	6	37	26	23	26	20	28	-11	20	-2	30
32	10			36	15	12	27	20	24	-17	21		
26	14	34	2, 6	32	27	8	27	18	24	-18	19	-7	30
35	8	39	5	37	26	11	25	24	1, 22, 23, 26, 30	-24	19	-12	30
40	1	61	18	42	27	28	26	48	1	-12	20	-2	28
38	10				26	26, 27	21	21	27	-11	21	-2	30, 31
26	10	34	2, 6	32	27	8	27	12	26	-26	19	-26	30
37	10	38	1	42	11, 23	20	26	23	24	-12	20		
32	9	40	6, 13	37	27	22	27	23	27	-13	21	4	31
37	10	42	19	39	27	22	27	21	31	-24	21		
31	1	35	19	29	6	16	26					-17	31
36	10	45	16	42	27								
37	10, 13	38	19	36	27	19	27	20	31	-25	21	-14	31
34	10	40	18	36	27	18	26	16	27	-20	11, 20	-11	30
34	12	39	10, 13	34	27	23	26	25	27	-8	21	-2	31
32	30	31	14	32	26	15	26	20	31	-16	20	-13	31
33	9	37	1	38	26, 27	13	26	19	6	-24	20	-15	30
36	11	40	28	33	25	22	26	20	26	-20	21		
31	10	35	19	39	28	12	27, 28	12	24, 31	-19	20	-5	31
30	10	32	19	38	13, 27	12	25	18	30	-12	20	-25	31
33	10	35	19	38	27	17	27	12	31	-6	20	-2	28
32	10	36	19	32	9	21	26	23	31	-15	20	-10	31
34	10	39	7	40	25	21	27	13	31	-11	20	-13	31
38	13	39	19	44	27	25	26	22	25	-22	21	-10	31
42	9	47	13	42	26	31	26	28	27	-10	21	13	31

NOTE.—See general index for additional temperature and precipitation tables.

## Montana's Hot Springs.

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### Numerous Hot Springs Whose Waters Carry Healing and Curative Properties—A Future American Carlsbad.

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Montana is not given to boasting, in fact, as all its people have been prosperous in the past, their prosperity based on the natural advantages offered by their location, they are not inclined to call the attention of the outside world at all to the innumerable advantages that Nature in her kindness has placed in the custody of the Treasure State.

We have written of the resources and natural advantages of the state that may be used in the development of great industrial and wealth-producing industries, but little mention has been made of the state as a health resort, the item being regarded as of lesser importance, perhaps, by reason of the fact that our people are so healthy that they seldom think of the sick or of the necessity of any form of medicinal remedy.

Of the hot springs within the state and which contain proved medicinal qualities, and which have been placed in condition to serve suffering humanity that may come from other states to receive the benefit of the healing and curative waters, are Hunter's Hot Springs, Gregson's, White Sulphur Springs, Alhambra, Lo Lo Springs, Sleeping Child Springs, Wise's Hot Springs and Pipe Stone Springs. At all of these places there are comfortable and inexpensive hotel accommodations and every convenience for bathing and the various uses of the waters.

Among the springs that have not been brought to general attention, are those located at the head of the Sun river. At present they are a considerable distance from railway facilities, and can only be reached by private conveyance. They are located the most picturesquely in the heart of the Rockies, and there are hundreds who testify to the wonderful curative powers of the waters and to the sedimentary deposit of a ledge matter that contains sulphur, iron, magnesia, potash, aluminum, soda and other minerals in sulphate form and similar in ingredient to the noted Carlsbad Sprudel salts. The matter of this ledge is solvent in water and in recent years has been experimentally and successfully administered in the curing of many skin and blood diseases. When transportation reaches the vicinity and accommodations are provided for the entertainment of guests, these springs will become an American Carlsbad.

With the growth of the state and the wider dissemination of the healthful advantages there are here for the invalids, thousands will come from the east, regain their health and live to sing the praises of the state.

## The State Capitol.

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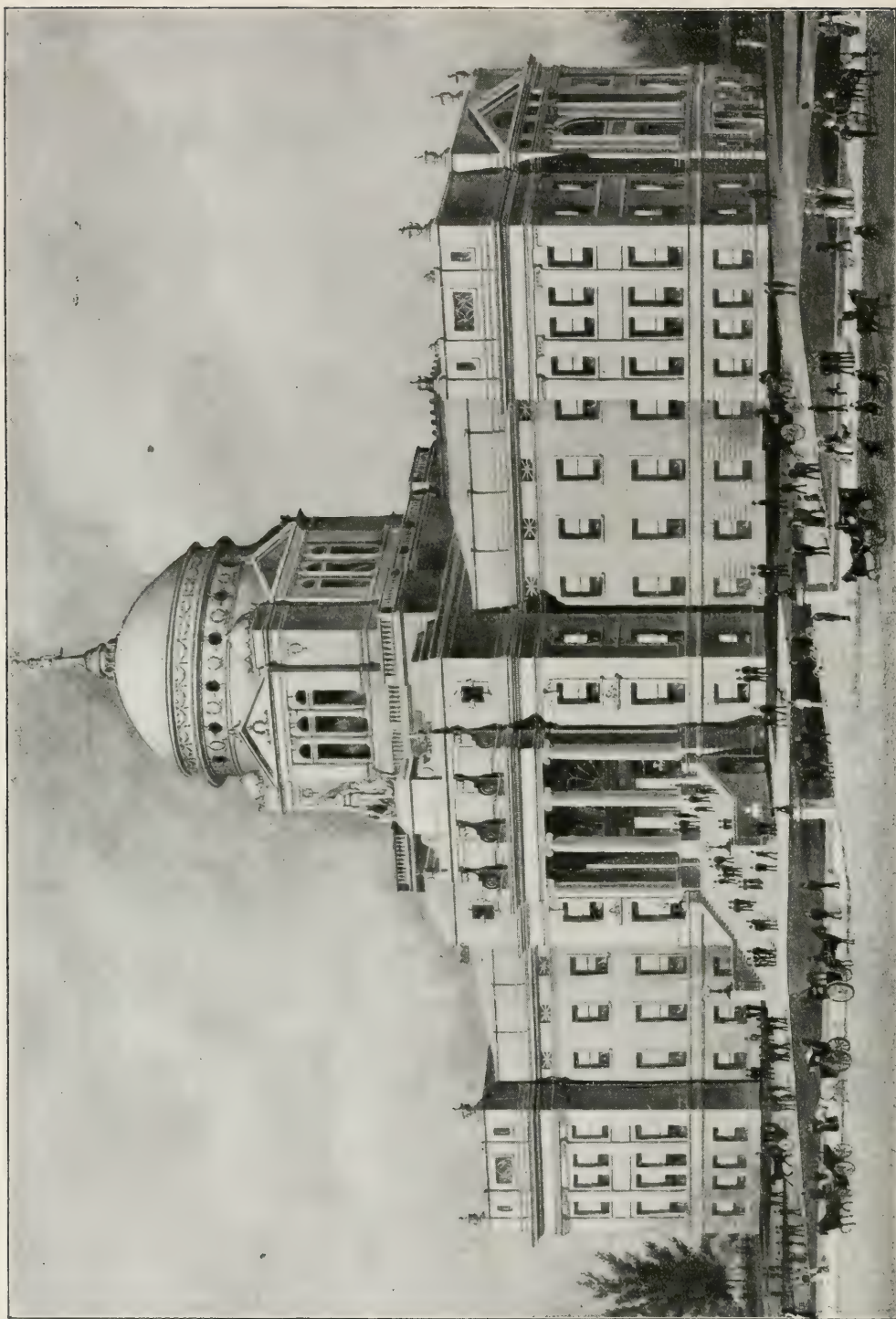
The State Capitol is not an elaborate public structure, as such buildings generally go, nor is it expensive, as the cost is limited to \$275,000, but it is ample for the requirements, is substantial and as artistic as a public building should be. It is expected that the building will be ready for occupancy the latter part of the coming summer.

On the first floor the State Land Department will have two rooms and a vault, the Inspector of Mines will have one room, the Inspector of Boilers one room, the State Veterinarian one room, the Boards of Stock and Sheep Commissioners one room, ante-room and vault; the Bureau of Agriculture, Labor and Industry two rooms, the Historical Society one large room, the Adjutant General one room and vault, the Board of Medical Examiners one room, the Board of Equalization one room and vault, the Board of Pardons one room, the Board of Prison Commissioners and Board of Commissioners of the Insane one room, the Board of Examiners and Furnishing Board one room and vault, the State Arid Land Commission, one room, the State Examiner two rooms and vault, the Boards of Health, Dental Examiners and Pharmacy one room, Custodian of the Building one room.

On the second floor the Governor will have a reception room, business office, a room for the private secretary and a vault; the Secretary of State a waiting room, business room, private room and a vault; the Attorney General a waiting room, private room, clerk's room and vault; State Auditor, two rooms and vault; State Treasurer, two rooms and vault; Superintendent of Public Instruction, two rooms; Supreme Court, one court room, three Justices' rooms, one clerk's room, one marshal's office and vault; Law Library, one large library room and Librarian's room.

The third floor is devoted to the accommodation of the Legislative Assembly. The Senate department will have a senate chamber, one retiring room, with cloak and toilet rooms adjoining, and one room each for the Lieutenant Governor, Secretary and Sergeant-at-arms, and four committee rooms. The House will be accommodated with an assembly room, one retiring room, with cloak and toilet rooms, and one room each for the Speaker, Clerk and Sergeant-at-arms, and six committee rooms.





THE CAPITOL OF MONTANA, IN PROCESS OF CONSTRUCTION AT HELENA. FROM A COPYRIGHTED DRAWING BY BELL & KENT.

## Libraries of the State.

The following statistics and interesting particulars of the libraries of the state were secured by Mary C. Gardner, of the Helena Public library. Miss Gardner finds that Montana has forty-one public libraries, using the term in a broad sense. Seven of these are supported by local taxation, and are public libraries strictly speaking. They are located respectively at Bozeman, Butte, Dillon, Great Falls, Helena, Kalispell and Missoula. The organization of the Parmly Billings Memorial Library will be accomplished shortly, making an eighth library supported by a city tax. The State Library (two departments) and the libraries of the State University, the State College of Agriculture and Mechanic Arts, and the State Normal School all receive public money for their support. Other institutions, such as the State Prison, Reform School, the Soldiers' Home, the Home for Orphans and the Deaf and Dumb School, have small collections of books which have been acquired without state aid. Several libraries are supported by private educational institutions, for the use of students and faculty, namely those of the College of Montana, Montana Wesleyan University and Saint Vincent's Academy. A number are supported by library associations, clubs or other organizations. According to statistics gathered by the writer, the number of volumes has increased from nearly 160,000 in June, 1899, to nearly 191,000, a gain of 19 per cent. School libraries, which have increased from a total of 16,500 to almost 33,000 volumes, are included in the number. The loans for home use from Montana libraries amount to about 300,000 annually. The following table shows, in round numbers, the number of volumes in each of the libraries of the state:

<b>Anaconda.</b>	
	Number of Volumes
Hearst Free Library .....	6,000
<b>Boulder.</b>	
Library of Montana State Deaf and Dumb School .....	200
<b>Bozeman.</b>	
Bozeman Free Library .....	8,200
Library of Montana State College of Agriculture .....	6,000
	14,200
<b>Butte.</b>	
Butte Free Public Library .....	30,000
Butte Miners' Union Library .....	600
Library of Medical Association of Montana .....	500
Butte Fire Department Library .....	500
Pioneer Library (Knights of Labor) .....	500
Canadian Institute .....	300
Literary Society Freja Library .....	200
Library of Montana Society of Engineers .....	100
Christian Science Reading-room and Library .....	100
	32,800
<b>Columbia Falls.</b>	
Library of Montana State Soldiers' Home .....	1,000

<b>Deer Lodge.</b>		
College of Montana Library .....	4,000	
Montana State Prison Library .....	1,400	
		5,400
<b>Dillon.</b>		
Dillon Public Library .....	2,500	
Montana State Normal School Library .....	2,700	
		5,200
<b>East Helena.</b>		
Public Library and Reading-room .....		1,000
<b>Great Falls.</b>		
Valeria Public Library .....		6,500
<b>Helena.</b>		
Montana State Library-Historical and Miscellaneous Department....	15,500	
Montana State Library-Law Department.....	10,500	
Montana State Superintendent of Public Instruction—Office Library	800	
Montana State Bureau of Agriculture, Labor and Industry—Office		
Library .....	700	
United States Weather Bureau—Office Library .....	200	
Helena Public Library .....	30,000	
Helena Fire Department Library .....	200	
Montana Wesleyan University Library .....	2,200	
Sacred Hearts Library ....	1,600	
Montana Diocesan Library (Roman Catholic) .....	2,200	
Saint Vincent's Academy Library .....	1,000	
Montana Grand Lodge Masonic Library.....	2,000	
Montana Club Library .....	1,000	
Post Library, Fort Harrison .....	2,100	
		70,000
<b>Kalispell.</b>		
Public Library .....		1,200
<b>Miles City.</b>		
Library of Montana State Reform School.....		100
<b>Missoula.</b>		
Missoula Free Public Library .....	5,000	
Montana State University Library .....	6,000	
		11,000
<b>Sand Coulee.</b>		
Sand Coulee Library Association .....		1,200
<b>Twin Bridges.</b>		
Library of Montana State Home for Orphans .....	100	
Public Library .....	1,400	
		1,500
Montana School District Libraries .....		33,000
<b>Total .....</b>		<b>190,300</b>

Following are a few historical and statistical facts concerning the more important libraries of the state. The matter has been collected largely by Mr. Frank C. Patten, formerly librarian of the Helena Public Library:

**Anaconda.**—The Hearst Free Library is the gift of Mrs. Phoebe A. Hearst, as a memorial to her husband, the late Senator Hearst, of California. It was established in March, 1895, in temporary quarters, with about 2,000 volumes. The present building was completed in 1898, at a cost of \$60,000. It is 72x75 feet, and two stories in height. The materials are granite and pressed brick. The finish is in quarter-sawed white oak. The walls and ceiling are beautifully colored. The main floor is devoted to the loan department and the general reading room. On the second floor there are the reference department and meeting and club rooms. There are about 6,000 volumes. About 1,000 are added yearly. The periodicals currently received number 86. Loans for home use are about 28,000 volumes a year. The library is open twelve hours a day.



**Billings.**—Mr. Frederick Billings, Jr., son of the late Hon. Frederick Billings, of New York, has donated to the city of Billings a \$20,000 library building, in memory of his brother, Parmly, who lived there years ago. The building, 60x54 feet, is of native sandstone. The style of architecture is Romanesque. The base is of granite 18 inches high, the cornice of copper, and the roof of Spanish tile. The basement, which is 12 feet in height, and almost entirely above ground, contains the heating plant and fuel room in the rear, with a room for club meetings occupying the remainder of the space. The main floor will be the library proper. The ceiling is 15 feet high, and is



THE PUBLIC LIBRARY—HELENA.

arched. The interior finish is of oak. The floors are of maple. The building is located in a park donated by the Northern Pacific railway. The city has voted a tax to purchase books and maintain the library.

**Bozeman.**—The public library occupies a room of about 1,100 square feet in the City Hall. There is a collection of about 8,200 books. The loans for home use aggregate 15,000 a year. There is no reading room. The library is open four hours a day for three days in the week. Revenue is derived from a city tax of one-half mill on the dollar, which now yields about \$1,000 a year.

**Butte.**—About 1891 Mr. Charles X. Larrabee offered \$10,000 toward a library if the citizens would add \$10,000 to it. The result was that the friends of the library project were able to offer \$22,000 as a book fund, provided that the city would erect a suitable library building, and properly support the

library. In 1893 the city erected a \$100,000 building and gave the institution the main floor, about 5,000 square feet, elegantly furnished. The revenue for the support of the library is derived from a city tax of one mill, which yields about \$17,000. The use is free to all residents of Silver Bow county. There are about 30,000 volumes, and the loans for home use are about 90,000 volumes a year. The library is well selected. The collection of books on all subjects relating to mining is excellent. There is also a good collection of art works. There are about 200 current periodicals in the reading room. The library is open thirteen hours a day.

**Dillon.**—The Dillon Public Library began as a book club, with an annual fee of \$5.00. Since 1888 it has been a free library. In 1896 a city tax of one mill on the dollar was voted. The library is open two evenings in the week from 7 o'clock until 10. There are about 2,500 volumes. The loans for home use are about 5,000 a year. No reading room is maintained.

**Great Falls.**—A number of citizens formed a library association in 1889. They erected in 1891, with funds raised by subscription, a library building costing \$3,500, on a lot donated by the townsite company. In April, 1892, the property was transferred to the city, on condition that at least \$3,000 annually be given for the support of the library. There are about 6,500 volumes, and 22,000 volumes a year are loaned for home use. The open hours are from 10:30 a. m. to 9:30 p. m. The library has so outgrown the capacity of its building that the trustees have recommended to the City Council the erection of an addition. The Council has ordered the addition, which is to cost not more than \$2,000. The library's capacity will thus be doubled. A public-spirited citizen has offered to donate to the library, upon completion of the improvements, \$1,000 worth of books.

**Helena.**—In 1870 Congress appropriated \$2,500 for a territorial library. This was the beginning of what is now the State Library. In 1881 the Legislature established the Montana Law Library, and in April, 1891, the Montana Historical Society, which dates from February, 1865, transferred to the state its collection of books and other property, and the Historical Library became a part of the State Library. The law department contains about 10,500 volumes. The historical and miscellaneous department has about 15,500 volumes and 12,000 pamphlets. There are 95 current periodicals received. Most of these are Montana publications. There are over 800 bound volumes of Montana newspapers, dating back to 1864. The library contains many valuable diaries, journals, records, letters and other manuscripts, and a good collection of Montana maps. Two volumes of historical contributions have been published. The historical museum is growing rapidly, and in it may be found many rare treasures illustrating Montana history and that of the northwest in general. About \$5,000 is expended annually for the support of the library. The law department is open seven hours a day. The historical and miscellaneous department is open six hours. The library now occupies rooms in the Lewis and Clarke county court house. Upon the completion of the new State Capitol Building the library will be moved there.

The Helena Public Library had its beginning in 1868 as a subscription library. In 1886 it became a public library supported by a city tax. In 1892

the city erected in connection with the Auditorium a \$10,000 library building, 35x80 feet, and three stories in height. The support of the institution is derived from a city tax of three-fourths of a mill on the dollar, yielding about \$7,500. There are about 30,000 volumes and about 15,700 pamphlets. Over 10,000 volumes of the loan department are kept on open shelves. The reading room contains about 3,000 reference books and over 500 current periodicals. About 90,000 volumes a year are loaned for home use. Special pains is taken to meet the needs of teachers, students and young readers. The library is open thirteen and a half hours a day.

The Montana Grand Lodge Masonic Library is a reference library for Masons only. There are about 2,000 volumes and 5,000 pamphlets. About 50 current periodicals are on file in the reading room in the Temple.

Sacred Hearts Library was started in 1888, and is maintained for the parish of the Roman Catholic Cathedral of the Sacred Hearts. A small monthly fee is charged for its use. The library is open every afternoon. There are about 1,600 volumes.

The Montana Club has a library of about 1,000 volumes, begun in 1882. It is a reference library for the use of members only. About 25 current periodicals are received.

**Kalispell.**—The library was founded in December, 1897. Revenue for its support was obtained by giving entertainments, etc., until May, 1900, when the people voted to support it as a free library by a city tax. The fee of \$1.00 a year for borrowing books was then done away with. There are about 1,200 volumes. The library is open five and a half hours daily. A large use by the children is reported.

**Missoula.**—A tax of one mill on the dollar, yielding about \$2,500 yearly, is devoted to the support of the Public Library, which was organized in 1894. A literary club gave a small collection of books as a beginning. There are now about 5,000 volumes, and 55 periodicals are currently received for the reading room. The loans for home use are about 15,000 volumes a year. The library occupies rented rooms, and is open five hours a day.



THE PUBLIC LIBRARY—BUTTE.



# The Schools.

## GREAT FALLS PUBLIC SCHOOLS.

One of the most potent forces in attracting people of culture and refinement to settle in a community or city is that of providing adequate and effective school facilities. In this particular the people of Great Falls have been exceptionally active. They have always provided liberally in advance for the pressing demands of their rapidly increasing school population.



WHITTIER SCHOOL - GREAT FALLS.

In 1886 she had one school building worth five hundred dollars, one teacher and twenty pupils. To-day she has ten large buildings, which, with equipment and grounds are valued at a quarter of a million dollars, a teaching force of forty-eight, that will compare favorably with the corps of teachers of any city in the country, and a school census of over twenty-six hundred children. The building capacity is fifty-two times, the teaching force forty-eight, and the school census over one hundred and thirty times what it was fourteen years ago. This gives some idea of the demands made upon the people to keep pace with the growth.

The schools have grown from an ungraded school of instruction in 1886 to a thoroughly graded system that is second to no city in the northwest, comprising primary, grammar and high school departments.

The primary department extends through the first four years of the child's school life, and includes the following course of instruction: Reading and spelling, form and drawing, color, plants and animals, paper folding, modeling, oral and written language, numbers, geography, penmanship, morals and manners, music and calisthenics.

The Grammar department comprises the work of the fifth, sixth, seventh and eighth years, and includes instruction in the following: Reading and spelling, oral and written arithmetic, language, literature and composition, plants and animals, natural phenomena, geography, history and civics, physi-

ology and hygiene, map-drawing, penmanship, drawing, morals and manners, music and calisthenics.

The high school offers three complete courses of instruction of four years each, any one of which, if care is observed in the selection of options, will prepare students for admission to our leading colleges and great universities, and will give such educational training\*as will enable the student to pursue



GREAT FALLS HIGH SCHOOL.

an independent course of study, or a successful business career.

The Latin course includes four years' work in Latin and in English, two in German, one-half year each in physical geography, botany, physiology, ancient history, Greek history, Roman history, United States history and civics, one year and a half each in algebra and geometry, one year in physics, two years of two periods per week in drawing.

The scientific course is identical with the Latin course, except that one year in chemistry, and one year in geology or astronomy are substituted for the third and fourth years of Latin.

In the English course word study, English grammar, arithmetic, book-keeping, English history and English literature are substituted for the four years' of foreign languages. In the eleventh and twelfth years of this course the students may select from the other two.

The "English" in all the courses includes "in logical correlation, orthography, composition, rhetoric, the history of English and American literature, and the reading of English and American classics, with the idea of gaining power in the use of the English language, and acquiring a knowledge of and a taste for the best literature."

Music is given a period daily under the direction of a special teacher.

Rhetoricals are required of each pupil once in eight weeks throughout the four years.

The method of instruction in all the departments is to harmoniously develop all the powers of the child—physical, intellectual and moral—to make a true manhood and womanhood. It is intended that the work of the school shall help the child to help himself, shall make him an independent thinker, self-reliant and self-confident, and thus a helpful factor in the community in which he shall live.

The excellent course of instruction provided in the schools has been attracting an increased number of tuition pupils to the city each year, and today the schools are recognized as the best in the northern and eastern parts of the state. The tuition is small, being based upon the actual cost of the instruction.

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### THE BILLINGS SCHOOLS.

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(By Prof. H. M. Brayton, Superintendent.)

Like other fast growing cities, Billings has made rapid progress in matters educational. In 1884 the first brick school building was constructed. In 1892 the Third Ward school was built, and in 1898 a temporary building of two rooms was constructed. Already all of these buildings are inadequate. At the present time an eight-room building is being finished, four rooms of which will be occupied by January 3, 1901. The upper floor of this new building is intended for high school purposes, and will be equipped with every modern appliance for the comfort and convenience of the students.

The school sentiment of this city is favorable to every proposition that will advance its school interests, a fact well evidenced by the votes of many taxpayers to secure a larger and more adequate high school building, only six votes being cast against the bond proposition. Besides this an even greater evidence of school spirit was shown in 1899, when all of the special school tax except ninety dollars was voluntarily paid, thus enabling the Billings schools to remain in session during the entire school year of 1899-'00. The residents of districts adjacent to our city appreciate the advantages



which our schools offer, and nearly all of them having children of school age, who are no longer accommodated by their own schools, now send them here. About 6 per cent. of the entire enrollment last year consisted of non-resident pupils.

Few school boards are so consistently persevering in their determination to secure only professional teachers. The present corps of sixteen teachers has been gathered from various successful schools, and everyone has either a college diploma, a normal school diploma, or its equivalent in successful experience.

In the matter of equipment, the pupils have the benefit of what is the latest and best in all departments. Each room, from the first to the eighth grade inclusive, has a specially selected library of juvenile books adapted to the pupils' needs and ability. The high school library, of several hundred volumes, is especially selected with reference to the literature outlines for college preparation, besides containing a wide diversity of interesting and instructive matter on science, arts, history, biography, geography, adventure, travels, moral, religious, etc. The laboratory, for which a room is specially fitted, was recently equipped for doing experimental work in the sciences required for college entrance. The botanical instruction is facilitated by use of five imported compound microscopes (Richart's). To all of which apparatus the school board annually adds such material as breakage or new subjects render necessary.

The course of study in the grades is thoroughly up to date, including, besides the very essential "three R's," such subjects as singing, nature study and drawing, all of which are regularly taught in all grades below the high school. The high school course includes all subjects prescribed by the State Board of Education, and in the development of these secondary branches the teachers are making a special endeavor to do work of a quality to meet the approval of the faculties of such higher educational institutions as our graduates may enter. This is done in the thorough belief that quality, rather than quantity or kind, is the most essential element of high school development, giving to each student real power for future work, whether his schooling ends with the high school or is continued in college or normal work.

A large percentage of the graduates of the Billings high school are now attending higher institutions of learning, and more than half of the present class of 1901 intend to continue their studies in higher schools.

Nothing could more plainly express the high aims and educational spirit pervading our schools than the above fact. Students are quickly influenced by their school environment, and nothing outside the assistance of good teachers is so helpful as association with ambitious students.

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### GALLATIN COUNTY HIGH SCHOOL.

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The Gallatin County Free High School is located at Bozeman. The school was established in the summer of 1899. In July of that year the people of Gallatin county voted to establish such a school in accordance with

the provisions of the county free high school law enacted at the previous session of the Legislature. The school is maintained by a special tax of one mill levied on all the taxable property of the county.

The board of trustees organized in August, 1899, and elected a principal. Two assistant teachers were employed, and the school was first opened on September 11, 1899.

The total enrollment of the first year was ninety-two. The enrollment at the beginning of the second semester of the present school year, in January, will be one hundred and forty. The great majority of the persons enrolled are residents of Bozeman, but the number of pupils from outside districts is increasing, and will be this year 15 per cent. of the total number. The school now employs a principal and three assistants, and a special teacher of drawing.

Three courses of study, each providing a period of three years, are provided. The graduates of the school are admitted without examination to the state institutions of higher education.

A good beginning has been made in supplying the school with a proper equipment. The library of works of reference on history contains sixty carefully selected volumes, and the sum of three hundred dollars has been expended in the purchase of apparatus and appliances used in the study of the natural sciences.

The school is at present being held in a rented building, but it is the intention of the board of trustees to erect, during the coming summer, a building that will be in every way adapted to present and future needs.

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### BUTTE PUBLIC SCHOOLS.

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The schools, churches and libraries of a city are an index to the moral and intellectual standard of the people. They are the arteries which carry the pure civic blood throughout the system, giving a healthful, inspiring character to the people, thus preventing those degenerating tendencies which would otherwise fasten themselves upon the community.

Butte is noted the world over for its mining industries. Everything seems to be swallowed up in this one great employment, together with those other activities that are in fact a part of, or incident to the great and absorbing industry of the city. Its public school system is not, therefore, an obtrusive factor forcing itself upon the attention of the visitor. It is none the less, however, an institution of marvelous efficiency, thrilling every home in the community with its helpful and inspiring touch, and doing more than can be told in giving to the rising generation an intelligent and sturdy manhood and womanhood.

The organization of the school system is modeled after those found in the most progressive cities of the east. The course of study covers a period of twelve years, divided into a primary department of four years, a grammar department of four years, and a high school department of four years. The work of each year or grade is divided into two divisions so that only an



interval of five months separates the different classes, thus making it possible for pupils somewhat in advance of their class to "catch up" with the class in advance, and so move on as rapidly as their capabilities will permit.

The regular promotions from one class to another throughout the entire system occur at the beginning and middle of the year, but special promotions are made whenever a pupil's proficiency is such as to justify his advancement to a higher class.



A GRADED SCHOOL—RUTTE.

The system is flexible, and is at all times made to serve the interests of the child.

The course of study for the primary and grammar grades includes all the common branches usually taught in a well regulated school system. These branches are recognized as having two distinct and legitimate functions connected with the school activities; (1) to serve as means of stimulating into healthy activity the dormant powers which the child possesses, and (2) to give him that fund of practical knowledge which is necessary and desirable in performing the ordinary business transactions of life. These are the two accomplishments which combine to prepare the youth of our land for honorable and useful citizenship. As the great majority of children do



not go beyond the grammar grades, every possible effort in system, supervision and instruction is put forth to make the work of these grades effective in producing intelligent and self-dependent young men and women.

The high school takes up the work where it is terminated by the grammar grades, and carries it forward with two distinct objects in view. One course of study is designed to give a broad and thorough education to those young men and women who, desirous of extending the work of the grammar grades, are not able to take advantage of the facilities afforded by the colleges and universities. This is, therefore, distinctively a general and complete course, and is designed to give those who pursue it as broad and comprehensive a view of life and nature as is possible during the four years required for its completion.

Another course of study preparing for admission to higher institutions of learning, is provided for those who expect, after graduation, to take a college or university course. This course is so arranged, and the instruction given is so thorough that upon its completion pupils are admitted without examination to several of the strongest colleges and universities of the land.

The buildings necessary to accommodate the school system at the present time include a magnificent central high school and thirteen ward buildings, conveniently located in different parts of the city, together with a large number of rented annexes to accommodate the overflow of attendance. These buildings are for the best part modern, beautiful and up-to-date in everything that pertains to heating, ventilation, and in those things which look to the comfort and convenience of the pupils. New buildings to meet the demands of the growing city, and to take the place of old and inadequate structures are being erected every year, and yet so rapid is the growth of the city that it is practically impossible for the board of trustees to keep pace with the demands made upon it for school room. It is not, however, ill advised to say that with the progressive ideas of the board of trustees and their splendid financial management of the affairs of the district, Butte is destined in a very few years to have the finest and most modern school buildings to be found in any city in the great northwest.

To take proper care of the seven thousand children enrolled in the city schools requires the full time and energies of one hundred and seventy teachers and supervisors.

This number includes one superintendent, fourteen principals, two special teachers, a clerk and two office assistants. This large corps of teachers and supervisors has been selected with reference to their scholarship and teaching ability, and it is because of their real moral and professional worth that the schools have reached their present degree of excellence.

The present efficient system is the result of years of careful thought and study on the part of the boards of trustees, of wise management and direction by the superintendents who have had charge of them, and, if possible, even more of the faithful and efficient services of the large corps of teachers who have so skillfully and uncomplainingly performed the laborious duties which have devolved upon them from year to year.

There is, and there can be, no question as to the future of the Butte schools. Not only are the people able to maintain a system of the highest

efficiency but there exists a public sentiment that gives assurance not only that such a system will be maintained, but that its efficiency will be increased wherever it is possible to do it by means that have been tested and proved to be effective and rational.

The following statement is taken from President Mueller's address to the graduating class, June, 1899:

"In 1882, seventeen years ago, 14 teachers were employed in the Butte schools at a monthly salary of \$785, to teach less than 900 pupils. The census for the year was 1,456, and the total expenditures were \$14,404. The value



HIGH SCHOOL—BUTTE.

of school buildings, sites and furniture was \$44,150. Ten years later, or in 1892, the little corps of 14 teachers had been increased to 63, and the monthly pay-roll to \$6,500, while the census had grown from 1,456 to 5,037, and the total expenditure had been increased to \$154,000. Last year, 1898, the number of teachers had increased to a total of 112, the census to 8,447, with a monthly pay-roll of over \$10,000; a total expenditure of \$170,450, and school property valued at \$400,500. This year, 1899, there are now 131 teachers employed, an increase of 19 over 1898, and a conservative estimate places the increase of the corps of teachers for the opening of the schools in September at 150; the census at 9,350; the monthly pay-roll at \$12,000; the total annual expenditure for the year at over \$200,000, and the value of school property at \$425,000. The growth of the schools the past years from 1894, can be shown by the actual facts as follows:

## SEVENTH ANNUAL REPORT OF BUREAU

Years	Teachers	Enrollment	Attendance	Census
June, 1894 .....	77	3,557	2,681	5,145
June, 1895 .....	87	3,665	2,826	5,323
June, 1896 .....	93	4,181	3,253	5,685
June, 1897 .....	98	4,600	3,500	6,354
June, 1898 .....	112	5,485	3,665	6,894
June, 1899 .....	131	6,162	4,474	8,447

The above facts show an increase in five years in the census of 3,302 pupils, or 64 per cent.; 2,068 pupils, or 73 per cent. in the enrollment; 1,842 pupils, or 64 per cent.; 2,608 pupils, or 73 per cent. in the enrollment; 1,842 it will certainly not be less, it will not be difficult to estimate the number of teachers, the expenditures and the census of the school population from year to year. If we base our calculations upon these facts, the present board of trustees and their immediate successors in office will be called upon to provide as follows:

Years	Teachers	Enrollment	Attendance	Census
1900 .....	150	7,100	5,300	10,000
1901 .....	175	7,900	6,500	11,500
1902 .....	210	8,800	7,500	13,100
1903 .....	250	10,000	8,500	14,500

This will mean an increase in expenditures of more than \$40,000 a year, or an increase of \$200,000, or even more, in five years, without taking into consideration the many buildings to be erected and appliances to be provided."

## GROWTH SINCE 1887.

Years	Teachers	Total Enrollment	Census (School Age)	Increase
1887-88 .....	24	1,967	2,934	.....
1888-89 .....	28	2,157	3,292	358
1889-90 .....	29	2,201	3,881	589
1890-91 .....	36	2,696	4,400	519
1891-92 .....	48	3,045	4,680	280
1892-Dec .....	77	3,477	5,037	357
1893-Dec .....	80	3,624	5,145	108
1894-Dec .....	87	3,794	5,323	178
1895-Dec .....	93	3,800	5,685	362
1896-Dec .....	98	4,019	6,354	669
1897-Dec .....	112	4,855	6,894	540
1898-Dec .....	121	5,547	8,447	1,553
1899-Dec .....	151	6,225	9,347	900
1900-Dec .....	168	6,500	10,400	1,053





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## DESCRIPTION AND VALUATION OF SCHOOL PROPERTY AND FIXTURES.

NAME OF SCHOOL	Character of Structure	Erected	No. of Sites	No. of Sittings	VALUATION		
					Sites	Buildings	Furniture and Fittings
New High School....	Stone and Brick ....	1897	3	500	\$13,500	\$125,000	\$8,000
Washington .....	Stone and Brick ....	1886	3	1050	20,000	50,000	3,600
Lincoln .....	Stone and Brick ....	1892	3	750	6,000	35,000	2,250
Garfield .....	Stone and Brick ....	1892	3	680	5,000	30,000	2,000
Madison .....	Stone and Brick ....	1896	1	130	1,000	4,500	400
Monroe .....	Stone and Brick ....	1890	2	300	3,000	11,000	900
Grant .....	Stone and Brick ....	1890	2	480	2,200	11,000	1,440
Franklin .....	Frame .....	1887	1	330	Leased...	5,000	2,210
Adams .....	Brick .....	1885	2	380	2,500	15,000	1,140
Blaine .....	Stone and Brick ....	1890	2	210	2,000	11,000	650
Jefferson .....	Brick .....	1885	1	200	500	7,500	480
Sherman .....	Frame .....	1886	1	50	600	1,000	150
Jackson .....	Brick .....	1892	1	100	500	3,000	300
Greeley .....	Brick .....	1897	1	160	1,000	5,000	650
Travonia .....	Brick .....	1885	1	50	750	1,000	150
Atlantic St.....	Brick and Stone ....	1899	3	750	5,000	30,000	3,000
Aluminum St .....	Stone and Brick ....	1899	3	550	3,500	25,000	2,500
Hobart .....	Frame .....	1900	1	200	1,700	2,500	1,500

## THE HELENA PUBLIC HIGH SCHOOL.

It is but just to say that no city in the west is more wise and generous in providing for the welfare of her school children than Helena.

With a population of twelve thousand inhabitants, Helena has six graded school buildings, ranging in size from five to ten rooms each, and other smaller buildings in which fewer rooms are utilized. These buildings are well lighted; supplied with hot air or steam plants, and otherwise furnished with all modern conveniences. Neither work nor expense has been spared to make these buildings attractive and healthful for the children who daily congregate within their walls.

With an enrollment of more than two thousand one hundred pupils and a daily attendance of one thousand eight hundred; with a corps of forty up-to-date teachers working along lines of the most approved schools of the United States, Helena has just cause to be proud of her schools. There is a supervisor of drawing, and art expression constitutes an important feature of the school work.

In the training school are the primary grades, in which the members of the training class see all the best theories and highest ideals practically illustrated in the daily work of the school.

To the curriculum of the past four years there has been added this year two departments, viz., a kindergarten department, accommodating more than one hundred pupils, and a manual training department, accommodating two hundred and fifty pupils. Each department is under the supervision of a specialist, and these advantages will be extended to each building in the city at the discretion of the board, as permitted by the funds of the district.

The aim of the high school is that of giving to all who come under its influence a training which shall enable them to realize the highest develop-

ment possible during a period of four years. It is not technical, but rather seeks to inculcate a spirit of broad, thorough scholarship, which is the best foundation for future work. In the arrangement of the course of study, two classes of students are taken into consideration. The first includes all who wish to pursue a course of study in some higher institution of learning; the second class places more emphasis upon a preparation for the practical duties of life.

Students upon entering the high school, or as soon thereafter as possible, are encouraged to determine upon some plan of work for the future, and thus secure every advantage that the school may offer in the way of preparation. The course of study provides for four years work in Latin, English and mathematics, three and one-half years in German, two each in Greek and French, and two years in the sciences, including one year of physics. By substituting equivalents in some minor cases, a student may prepare for admission to any of the best universities, or take such studies as will best fit him for active, practical business life.

The high school building is one of the finest in the west. It is modern and complete in all of its equipments, containing in all seventeen rooms, besides a large gymnasium. A library of eight hundred volumes; physical and chemical libraries fully equipped with the latest improvements and apparatus, a convenient art room well supplied with drawing materials contribute to the efficiency of the work.

At the present time the faculty is composed of ten teachers, eight of whom are specialists in charge of a department. The enrollment is three hundred and one. Of these thirty will graduate in June, 1901.

MEMORANDUM OF ATTENDANCE, ANNUAL EXPENDITURE, AND PER  
CAPITA COST, HELENA SCHOOLS.

Years	Attendance	Expenditure	Per Capita Cost
School Year 1890-91.....	1163	\$50,000	\$43.00
School Year 1891-92.....	1298	60,559	46.66
School Year 1893-94.....	1426	60,762	42.61
School Year 1894-95.....	1525	61,679	40.45
School Year 1895-96.....	1542	57,880	37.54
School Year 1896-97.....	1662	56,981	34.28
School Year 1897-98.....	1663	52,165	31.37
School Year 1898-99.....	1736	50,602	29.15
School Year 1899-1900.....	1744	58,045	33.28
School Year 1900-1901—Estimated.....	1806	56,000	31.00

THE ANACONDA SCHOOLS.

As the city of Anaconda is yet in her infancy, the history of her school system is naturally a short one.

About seventeen years ago there was a log school house situated about where the Montana hotel now stands, in which the few pupils of the vicinity



assembled to hear words of wisdom and sage advice from the school master, and to trace the "day's disaster" in the "morning face" of no less a personage than Judge M. J. Fitzpatrick. Today the Judge presides over a solemn conclave of men known as the Anaconda school board, which directs the educational cultivation of more than 1,500 school children.

"Dominie" Fitzpatrick could thrash the average "daily attendance" twice over during recess.

"President" Fitzpatrick holds a guiding hand over 40 school teachers and 1,600 school children, accommodated in six buildings and occupying 40 rooms.

The first school held in Anaconda proper was opened in "the little church around the corner" of the Montana hotel. A three-room building was next



HIGH SCHOOL—ANACONDA.

erected where the present high school stands. Three other rooms were piled upon top of these to meet the rapid growth of the school census. A little frame building situated on West Third street was next mustered into service, and dignified with the name of the "Grant school."

Mr. J. P. Gannon was principal of the schools in those days. His staff consisted of six teachers.

During the administration of his successor, Mr. A. C. Stone, now of Missoula, the high school first made its appearance, with Miss Emma Wave as principal. In this year, 1890, the Prescott was built. Mr. Stone was severely criticised by some indignant citizens for putting the new school house "away out in the country," as they said. Today the Prescott is in the heart of the west side.

It has six rooms with a seating capacity of 300.

The Lincoln, at the corner of Fifth and Chestnut, was next erected (1892). It contained six rooms, and was well constructed and furnished with many modern conveniences.

Two years later the Bryan school, so called in honor of the famous champion of silver, was added. It has six rooms and a seating capacity of 280.

In 1898 the Lincoln school was completely destroyed by fire. On the same site was erected the Lincoln of today, which for size, durability and

equipment, is unsurpassed by any school building in the state. It has 18 rooms, and can accommodate almost a thousand pupils.

Besides the above, the city system includes a small building called the West End school, about two miles up the canon, and a two-room building at Carroll, about a mile east.

The total enrollment of the Anaconda schools in December, 1900, was 1,603, the average number belonging, 1,336, and the average daily attendance, 1,268. The school census shows 3,146 children under 21 years of age.

Since Mr. Stone's time there have been three superintendents, viz., F. L. Kern, M. A. Stapleton and R. R. Kilroy, the present incumbent.

Considering the rapid growth, the people of Anaconda have every reason to be proud of their school system. Hampered by the necessity of continued construction, the numerous exigencies of a growing population, and the miserable apology that has been doing business as a school law, the schools have overcome many difficulties, until today, for equipment and organization they are thoroughly representative of the progressive west.

## The Newspapers of the State.

The newspapers during the past year enjoyed, with the other industrial institutions of the state, the prosperity and progress that has been general. There have been but few new ventures in the field, but several of the dailies, notably the Great Falls Tribune and Leader and the Butte dailies, have been greatly improved. In Helena, the Record was established, and the Evening Herald and Morning Independent have been brought up to the highest standard of metropolitan journalism. The newspapers of Montana, including the country press, are far and away ahead of similar publications anywhere on the continent, except the great productions of the eastern cities, and Montana is justly proud of them, and contributes to their support with pleasure. The list of newspapers failing to respond to the bureau inquiries is larger this year than usual, but that is accounted for by the fact that the circulars were sent out just when the journals were engaged in a warmly contested political campaign, and their time and attention was fully occupied.

### DIRECTORY OF NEWSPAPERS IN MONTANA.

Tribune .....	Dillon .....	F. E. Foote, Mgr.....
Examiner .....	Dillon .....	
Messenger .....	Townsend .....	C. H. Eaton .....
Star .....	Townsend .....	
Picket .....	Red Lodge .....	Walter Alderson, Mgr .....
Democrat .....	Red Lodge .....	J. D. Matheson .....
Times .....	Belt .....	R. H. Bemis, Mgr .....
Churchman .....	Great Falls .....	Pastor of .....
Leader .....	Great Falls .....	W. R. Connor, Bus. Mgr. ....
Tribune .....	Great Falls .....	O. S. Worden .....
Montana Herald .....	Great Falls .....	Waldemar Stein .....
News .....	Great Falls .....	O. M. Holmes .....
Herald .....	Havre .....	
Milk River Eagle .....	Havre .....	N. C. Westcott .....
Herald .....	Neihart .....	Abbott & Preston .....
River Press .....	Ft. Benton .....	W. K. Harbor, Mgr. ....
Opinion .....	Chinook .....	W. C. Kester .....
Times .....	Forsyth .....	Lyndes & Co., Mgrs. ....
News .....	Miles City .....	James G. Ramsey .....
Stockgrowers' Journal .....	Miles City .....	H. G. Potter .....
Yellowstone Journal .....	Miles City .....	Sam Gordon .....
Independent .....	Glendive .....	J. R. Widemyer .....
Review .....	Glendive .....	
Standard .....	Anaconda .....	W. E. Shandrew, Sec'y .....
Silver State .....	Deer Lodge .....	A. D. Hoss .....
Montana Churchman .....	Deer Lodge .....	Rev. E. G. Prout, Mgr. ....
Argus .....	Lewistown .....	John M. Vrooman .....
Democrat .....	Lewistown .....	
Bee .....	Kalispell .....	Bee Publishing Co. ....
Herald-Journal .....	Kalispell .....	Moore & Houtz .....
Inter-Lake .....	Kalispell .....	R. M. Goshorn, Mgr. ....
Montanian .....	Libby .....	D. A. Hendricks .....
News .....	Libby .....	Frank M. Leonard .....
Miner .....	Sylvanite .....	G. E. Shawler .....



Avant-Courier .....	Bozeman .....	Chas. R. Alderson, Mgr.....
Chronicle .....	Bozeman .....	F. E. Hoss, Bus. Mgr. ....
College Exponent .....	Bozeman .....	Ed Burk, Mgr.....
Republican .....	Bozeman .....	
The Call .....	Philipsburg .....	L. R. Hoss .....
Mail .....	Philipsburg .....	Bryan Bros. & Hauck.....
Progress .....	Basin .....	F. N. Wild.....
Age .....	Boulder .....	F. E. Cornish.....
Sentinel .....	Boulder .....	S. A. Robertson .....
Zephyr .....	Whitehall .....	Daniel Searles .....
Christian Advocate .....	Helena .....	Methodist Episcopal Church.....
Churchman .....	Helena .....	St. Peter's Episcopal Church....
Herald .....	Helena .....	E. L. Boardman, Mgr.....
Independent .....	Helena .....	John S. M. Neill, Mgr.....
Montana Staats Zeitung .....	Helena .....	Neagele & Son.....
Northwest Instructor .....	Helena .....	W. Hutton, Editor. ....
Northwestern Odd Fellow .....	Helena .....	I. O. O. F. ....
Record .....	Helena .....	E. J. Willis, Bus. Mgr.....
Stockman and Farmer .....	Helena .....	John W. Pace .....
The Workman .....	Helena .....	Ancient Order of United Workmen
Record .....	East Helena .....	J. T. Farris .....
Republican .....	East Helena .....	John Mills .....
Mountaineer .....	Marysville .....	
Sentinel .....	Pony .....	A. W. Noyes .....
Weekly Chinook .....	Sheridan .....	F. B. Linderman.....
Madisonian .....	Virginia City .....	J. T. Smith .....
Alder Gulch Times .....	Virginia City .....	
Monitor .....	Twin Bridges .....	B. F. Bowman.....
Rocky Mountain Husbandman .....	White Sulphur Spgs. ....	R. W. Sutherlin .....
News-Letter .....	Plains .....	O. Gould .....
Plainsman .....	Plains .....	
Fruit Grower and Missoulian .....	Missoula .....	C. H. Edwards .....
Democrat-Messenger .....	Missoula .....	Pearson, Turk & Co.....
Enterprise .....	Livingston .....	Frank Wright, Sec.....
Bitter Root Times .....	Hamilton .....	
Western News .....	Hamilton .....	Miles Romney .....
Republican .....	Hamilton .....	
I. O. G. T. News .....	Stevensville .....	Ind. Order of Odd Fellows.....
Northwest Tribune .....	Stevensville .....	J. R. Faulds .....
Inter Mountain .....	Butte .....	M. B. Berger, Mgr .....
Montana Journal .....	Butte .....	H. Rozenzweig .....
Miner .....	Butte .....	M. M. Miller, Mgr.....
Reveille .....	Butte .....	A. W. Brouse .....
Times .....	Butte .....	James Brown .....
Tribune-Review .....	Butte .....	Oates & Dunstan .....
Western Mining World .....	Butte .....	Chas. Heilbronner.....
High School Leader .....	Butte .....	
Express .....	Big Timber.....	Walter Aitkin .....
Pioneer .....	Big Timber.....	L. C. Olmstead .....
Yellowstone Leader .....	Big Timber.....	W. J. Hannah.....
Chronicle .....	Choteau .....	John E. Low.. ..
Montanan .....	Choteau .....	
Acantha .....	Dupuyer .....	Geo. W. Magee .....
Gazette.....	Glasgow .....	
Enterprise .....	Malta .....	J. D. B. Greig .....
Gazette .....	Billings .....	E. H. Becker.....
Times .....	Billings .....	M. C. Morris .....
News .....	Billings .....	

## REPORT OF NEWSPAPERS FOR THE YEAR ENDED JUNE 30, 1900.

No. of Employees June 30, 1900.	No. of weeks of employment given			Hours constituting a days Work	Days constituting a weeks work	Is business good compared with the preceding year?	Per Cent. of Increase.....	Per Cent. of Decrease.....	Amount of money invested in the business.....	Amount of business done during the year.....	Amount paid for labor.....	Year paper was established.	How often published.....	Morning or Evening.....	Political Complexion.....	Pounds of Paper used.....	No. of type-setting machines in use.....	No. of type-setting machines instal'd during yr	Each machine equal to about how many men...	
	Male Adults.....	Females.....	Boys.....																	Total.....
1	1	2	1	4	52	8	6	yes..	\$300 00	\$300 00	\$300 00 1893	Monthly	Weekly	.....	Republican	2,000	.....	.....	.....	
1	1	2	1	4	52	9 1/2	6	yes..	1,500 00	2,400 00	1,200 00 1887	Weekly	.....	.....	Republican	8,000	.....	.....	.....	
3	3	1	5	9	52	10	6	yes..	5,000 00	3,971 92	806 00 1887	Weekly	.....	.....	Ind. Rep	7,800	.....	.....	.....	
4	4	1	4	9	52	10	10	yes..	6,000 00	7,500 00	4,500 00 1879	D. & W.	.....	E	Republican	10,000	.....	.....	.....	
2	2	1	3	6	52	10	15	yes..	4,500 00	2,400 00	2,000 00 1890	Weekly	.....	.....	Silver Rep	1,500	.....	.....	.....	
3	3	3	3	9	52	9	6	no...	6,000 00	6,600 00	2,000 00 1884	Weekly	.....	.....	Stock	15,000	.....	.....	.....	
2	2	2	2	6	52	8	6	yes..	350 00	9,000 00	2,000 00 1893	Weekly	.....	.....	Democrat	24,000	.....	.....	.....	
1	1	1	1	3	52	8	6	yes..	26,000 00	10,000 00	3,800 00 1875	Weekly	.....	.....	Agriculture	3,000	.....	.....	.....	
3	3	1	4	8	52	10	6	yes..	5,000 00	12,000 00	3,000 00 1895	Weekly	.....	E	Democrat	10,000	.....	.....	.....	
6	6	6	6	18	52	8	6	yes..	6,000 00	10,000 00	9,000 00 1885	Daily	.....	.....	Democrat	11,000	.....	.....	.....	
4	4	2	6	12	52	9	6	yes..	12,000 00	3,000 00	6,000 00 1883	Weekly	.....	.....	Republican	2,700	.....	.....	.....	
4	4	1	5	10	52	8	15	yes..	2,000 00	7,000 00	1892	Weekly	.....	.....	Democrat	5,000	.....	.....	.....	
1	1	1	1	3	52	8	6	yes..	5,000 00	2,500 00	3,900 00 1890	S.- Weekly	.....	.....	Independent	1,890	.....	.....	.....	
2	2	2	2	6	52	9	6	yes..	2,000 00	2,500 00	200 00 1892	Weekly	.....	.....	Republican	1,500	.....	.....	.....	
6	6	6	6	18	52	9	6	yes..	6,000 00	.....	.....	.....	.....	.....	Silver Rep	7,000	.....	.....	.....	
2	2	2	2	6	52	9	6	yes..	5,000 00	.....	.....	.....	.....	.....	Republican	3,500	.....	.....	.....	
2	2	2	2	6	52	9	5	yes..	3,500 00	5,000 00	2,400 00 1894	Weekly	.....	.....	Independent	3,000	.....	.....	.....	
1	1	1	1	3	52	8	20	yes..	2,000 00	1,800 00	800 00 1894	Weekly	.....	.....	Republican	4,000	.....	.....	.....	
1	1	1	1	3	52	8	50	yes..	2,000 00	4,500 00	720 00 1897	Weekly	.....	M	Democrat	2,500	.....	.....	.....	
37	37	2	22	61	52	8	7	yes..	45,000 00	74,681 63	56,613 80 1876	D. & W.	.....	Ind. Democrat	.....	.....	.....	4	1	4
2	2	2	4	8	52	8	10	yes..	5,000 00	2,500 00	.....	.....	.....	Republican	5,720	.....	.....	.....	.....	.....
2	2	1	3	6	52	9	10	yes..	2,500 00	.....	1,500 00 1889	Weekly	.....	.....	Agri. & Horti.	5,000	.....	.....	.....	.....
2	2	1	4	7	52	9	6	yes..	3,500 00	.....	.....	.....	.....	.....	Republican	25,000	.....	.....	.....	.....
8	8	2	10	20	52	9	8	yes..	10,000 00	50,000 00	35,000 00 1866	D. & W.	.....	.....	Democrat	300,000	.....	.....	.....	.....
24	24	5	6	35	52	8	6	yes..	25,000 00	7,377 86	4,140 00 1881	Weekly	.....	.....	Republican	4,820	.....	.....	.....	.....
3	3	1	4	8	52	9	6	yes..	5,250 00	5,000 00	2,400 00 1872	Weekly	.....	.....	Democrat	4,800	.....	.....	.....	.....
3	3	3	3	9	52	9	6	no...	4,000 00	5,000 00	5,500 00 1889	Weekly	.....	.....	Republican	12,000	.....	.....	.....	.....
5	5	2	7	14	52	8	20	yes..	3,000 00	2,500 00	2,000 00 1884	Weekly	.....	.....	Republican	3,000	.....	.....	.....	.....
2	2	2	2	6	52	8	10	yes..	3,000 00	4,200 00	1,800 00 1891	Weekly	.....	.....	Democrat	10,000	.....	.....	.....	.....
2	2	2	2	6	52	9	6	yes..	2,500 00	.....	.....	.....	.....	.....	Democrat	10,000	.....	.....	.....	.....
9	9	2	9	20	52	9	25	yes..	17,500 00	42,000 00	27,040 00 1885	D. & W.	.....	M	Democrat	130,000	.....	.....	.....	.....
18	18	1	21	40	52	8	6	yes..	50,000 00	15,000 00	10,000 00	.....	D. & S. W	E	Republican	20,000	.....	.....	.....	.....
9	9	1	10	21	52	8	6	yes..	10,000 00	48,000 00	20,000 00 1885	D. & W.	.....	E	Republican	83,400	.....	.....	.....	.....
24	24	1	25	52	8	9	100	yes..	25,000 00	9,000 00	5,700 00 1880	D. & W.	.....	E	Republican	12,000	.....	.....	.....	.....
4	4	1	5	10	52	9	6	yes..	10,000 00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
203	203	23	41	267	.....	.....	.....	.....	320,400 00	\$351,231 41	\$214,369 80	.....	.....	.....	.....	1,038,948	.....	.....	.....	.....

## The Breweries of the State.

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**Making Beer and Malt One of the Growing Industries of Montana—The Barley Raised in the State Superior to That Raised in Any Other Part of the World.**

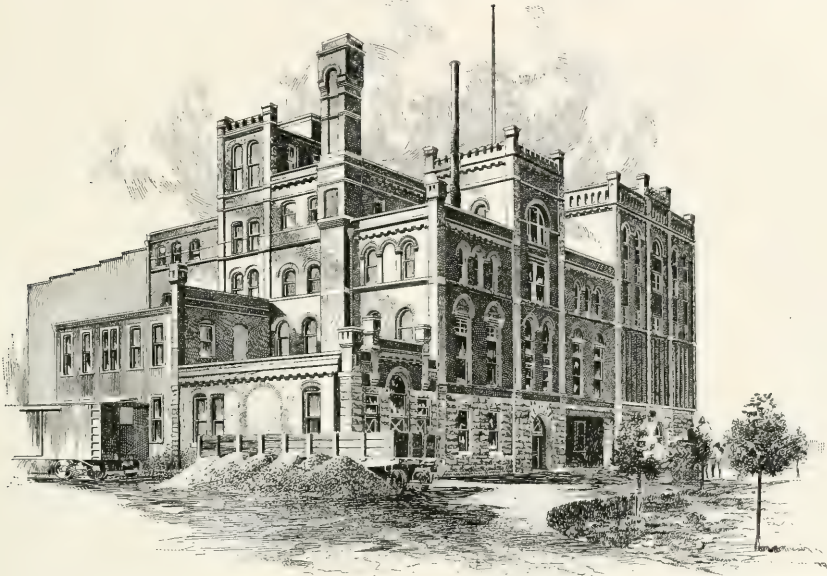
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The making of beer is one of the later industries of the state, but within the past three or four years it has grown to be an important element in local industrial life. While the making of this beverage is new in Montana, authorities on the subject state that it was made in China as far back as 2,207 B. C., and there are records of sumptuary laws that date back a thousand years earlier than that. Scandinavian mythology places the beverage with the nectars to be adored, and from that down there is a record with every period of the age. It is not the intention, however, to give the history of beer from its invention by Isis, but rather to call attention to the prominence and rapid growth of the manufacturing industry in this state, and to mention the special reasons that warrant the prediction that in the near future Montana will be one of the chief beer-producing states in the Union. The excellence of Montana's barley for malting and beer-making was first brought to public attention by the Manhattan Malting Company, which produces its barley in the Gallatin valley, and sells its malt to the world. It has been demonstrated by practical tests that Montana barley is superior for beer-making to that produced in any other part of the world, and since this knowledge has become general among the manufacturers of this line of beverage, it has created a domestic and foreign demand that far exceeds the supply. The encouragement of the lively demand is stimulating the raising of barley, and the output of the state in this line will experience a very rapid increase.

The Montana Brewing Company was organized at Great Falls in 1898, and has been particularly notable as an entire business and industrial success. The value of the plant of this company is in excess of a quarter million dollars, and it has a brewing capacity of two hundred barrels per day. Last year the output of the brewery was fifteen thousand barrels, and this year it will exceed sixteen thousand barrels, and over eighteen thousand cases of beer. The annual cellar capacity of the brewery is forty-five thousand barrels. The malting plant has a capacity of 100,000 bushels per year, and in this, the first year of its operation, its output was twenty-five thousand bushels; and will be run up to its full capacity during the coming year. The establishment of this plant not only added a very important industry to the resources of Great Falls, but it has proved of direct benefit to the farmers of the county, by providing them with a cash market for all the barley they can produce. The barley raised in the immediate vicinity so far has not nearly met the



requirements of the brewery, but the production is increasing rapidly, and will supply the demand in the next two or three years. When this condition is realized the county will receive the full benefit of the industry, as all the money expended for raw material, with the exception of hops, will remain at home. The success of the institution has been in a great measure due to the excellence and purity of the beverage produced, and this has been secured through having the most perfect system of brewing, and employing all the modern improvements known to the trade, using only the best grades of materials, and taking every possible care in the course of manufacture. The malting plant is one of the most modern as well as the largest in the west. The barley is never handled by men, but is elevated, spread and turned by



MONTANA BREWERY—GREAT FALLS.

machinery, and the work of nature is not interfered with while the germ is being sprouted in the barley. The malting of the barley raised in Cascade and neighboring counties has proved that the product is just as good as the noted barley of the Gallatin valley. The soil and the climate of this section of the state, for growing barley, are just what is a necessity to the best production of the cereal. The latitude is the natural home for barley, and if the farmer gives it the proper care and attention, he will be sure to harvest a big crop. It is known that where wheat grows well there barley will flourish also, and with far less labor. Today the price of barley is 55 to 60 cents per bushel, and wheat is only 60 to 65 cents, and since the same field that produces 35 bushels per acre of wheat will yield 50 to 55 bushels of barley, making in actual figures \$21 income from one acre of wheat and \$33 income from barley, there is, therefore, a net gain of \$12 in raising barley. Again, it is safe to say that barley has always a more standard price, and does not fluctuate so much as wheat and other cereals.

The American Brewing Company of Great Falls also has a large and modern plant, and is rapidly increasing its output. Among the other large brewery plants of the state are Kessler's at Helena, and the Centennial at Butte.

## REPORTS OF BREWERIES FOR YEAR ENDED JUNE 30, 1900.

Tracing Number....	Number of Employ- ees .....	Weeks brewery in operation during yr	Amount invested in business .....	Business done dur- ing the year .....	Amount paid for la- bor during year..	Amount of Montana barley used..... —Bushels .....	Amount of barley imported— Bushels .....	Am't of malt bought or made during y'r Bushels .....	Amount of malt im- ported during year Bushels .....	Price of barley per bushel .....	Value of malt per bushel .....	Weight of barley per bushel .....	Barrels of beer made .....	Value .....	Condition of bus- iness as compared with year pre- ceding .....	
															Inc.	Dec.
1	9	52	50,000 00	\$56,540 00	5,917 30	\$20,323	.....	26,000	.....	.39½	.70	.....	6,000	\$24,000	20	.....
2	15	52	40,000 00	60,000 00	.....	8,300	.....	8,300	.....	.57½	.83½	.....	5,000	25,000	10	.....
3	9	52	35,000 00	29,334 00	6,317 95	2,083	.....	2,105	.....	.43	.87½	.....	2,870	17,220	10	.....
4	24	52	120,000 00	146,157 55	17,975 05	.....	.....	24,000	20,000	.....	.91	.....	16,240	100,000	27	.....
5	19	52	100,000 00	167,985 41	22,131 15	.....	.....	19,000	4,316	.....	.76	.....	15,183	100,000	15	.....
6	45	52	450,000 00	330,000 00	65,000 00	65,000	.....	10,000	.....	.65	.68	.....	33,500	197,500	10	.....
7	2	52	5,000 00	5,000 00	1,200 00	600	.....	600	.....	.62½	.....	.....	350	3,500	same	.....
8	26	52	135,000 00	130,000 00	24,000 00	23,000	.....	23,000	.....	.55	.75	.....	14,550	13,000	10	.....
9	3	52	20,000 00	7,833 35	8,096 00	1,554	.....	1,765	.....	.60	.85½	.....	736	8,096	4	.....
.....	.....	.....	\$1,015,000 00	\$932,830 73	\$150,637 45	120,800	.....	114,770	.....	.....	.....	.....	100,429	\$488,316	.....	.....
.....	.....	.....	Inc. 33.10	.....	.....	.....	.....	Dec 5.65	.34 Inc.	.....	.....	.....	*	**	.....	.....

\* Increase 24.53.

\*\* Increase 25.70.

## Reports of the State Banks.

The report of the State Examiner, Mr. John G. Morony, states that the capital and surplus of twenty-one National banks, thirteen private banks, and fifteen state banks, is \$5,849,393.56, and the deposits \$28,732,447.96. The same authority gives the following returns of the state banks of the state:

### STATE AUDITOR'S SUMMARY OF STATE BANK REPORTS.

Report of the Condition of the 15 State Banks of the State of Montana, on June 30, 1900.

RESOURCES.	LIABILITIES.
Loans on real estate .....\$ 453,526 Loans on collateral security other than real estate ..... 408,190 Loans and discounts—all other.... 3,636,189 Overdrafts ..... 495,397 United States bonds ..... 1,629 State, county and municipal bonds and warrants ... .. 781,826 Other stocks, bonds and securities 39,129 Judgments, etc ... .. 139,562 Due from banks and bankers..... 1,220,913 Real estate, furniture and fixtures 318,910 Checks and other cash items..... 55,200 Cash on hand, viz: Gold coin .....\$309,920 Gold certificates ... .. 12,500 Silver coin ... .. 21,627 Silver certificates ... .. 14,368 Legal tenders ... .. 158,008 National bank notes ..... 23,515 Not classified ... .. 274,494 Total cash on hand ..... 814,432 All other resources ... .. 1,365	Capital Stock* .....\$ 990,000  Surplus fund. .... 199,250 Other undivided profits (less ex. penses and taxes paid) ..... 279,664  Dividends unpaid .... 3,900  Deposits subject to check.\$4,717,962 Deposits—Saving .. ..... 1,348,095 Total deposits ... .. 6,066,057  Due to other banks and bankers.. 622,387 All other liabilities ... .. 205,010  Total liabilities ... ..\$8,366,268
Total resources.....\$8,366,268	Total liabilities ... ..\$8,366,268

\* Dividends paid during the past year on Capital Stock:

Amount 6 banks with capital of \$470,000.00 paid .....	52,000
Per cent rate .....	11 per cent



## REPORTS OF THE CONDITION OF STATE BANKS

BANK.	RESOURCES.				
	Location.	Loans and Discounts.	Overdrafts.	Stocks and Bonds.	State and County Warrants.
Bank of Fergus County ...	Lewistown .....	541,045.04	25,477.36	.....	3,719.38
Bank of Boulder .....	Boulder .....	110,790.34	1,118.22	.....	16,111.81
Ravalli County Bank ...	Hamilton .....	54,650.65	231,504.78	.....	41,014.29
Carbon County Bank .....	Red Lodge .....	128,469.52	18,770.23	500.00	913.96
State Bank of Nelhart .....	Nelhart .....	35,450.97	9,161.01	.....	1,354.91
Cascade Bank .....	Great Falls .....	264,753.83	16,834.69	96,103.75	36,298.73
Union Bank & Trust Co. ....	Helena .....	593,771.32	7,810.95	89,500.00	220,389.64
Judith Basin Bank .....	Lewistown .....	235,495.34	3,313.11	.....	1,638.33
State Bank of Dillon .....	Dillon .....	108,411.13	6,668.01	.....	1,494.10
Bank of Twin Bridges .....	Twin Bridges .....	24,139.50	22,224.97	2,500.00	6,058.70
State Bank of Townsend .....	Townsend .....	33,175.13	13.80	642.50	5,028.09
Elling State Bank .....	Virginia City .....	111,413.09	126,356.80	600.00	2,116.20
Thos. Cruse Savings Bank .....	Helena .....	117,787.22	5,012.15	425,100.00	43,403.54
State Savings Bank .....	Butte .....	1,336,761.34	143,072.72	36,583.33	35,999.73
		3,696,114.42	617,338.80	651,429.58	415,541.40

BANKS.	LIABILITIES.				
	Location.	Capital Stock Paid in.	Contingent Fund. (Surplus)	Undivided Profits.	Individual Deposits Subject to Check.
Bank of Fergus County ...	Lewistown .....	200,000.00	20,000.00	97,818.51	199,656.64
Bank of Boulder .....	Boulder .....	30,000.00	1,500.00	5,836.52	92,696.76
Ravalli County Bank .....	Hamilton .....	50,000.00	.....	5,516.64	102,774.93
Carbon County Bank .....	Red Lodge .....	50,000.00	.....	2,913.85	82,579.48
State Bank of Nelhart .....	Nelhart .....	20,000.00	.....	181.09	26,645.35
Cascade Bank .....	Great Falls .....	75,000.00	15,000.00	12,943.02	206,796.95
Union Bank & Trust Co. ....	Helena .....	100,000.00	15,000.00	12,968.99	518,210.58
Judith Basin Bank .....	Lewistown .....	75,000.00	.....	15,378.56	77,724.94
State Bank of Dillon .....	Dillon .....	50,000.00	.....	.....	70,330.61
Bank of Twin Bridges .....	Twin Bridges .....	25,000.00	.....	.....	41,970.79
State Bank of Townsend .....	Townsend .....	25,000.00	.....	1,212.18	23,065.52
Elling State Bank .....	Virginia City .....	50,000.00	.....	5,898.52	370,251.52
Thos. Cruse Savings Bank .....	Helena .....	100,000.00	30,000.00	68,620.74	642,413.56
State Savings Bank .....	Butte .....	100,000.00	100,000.00	43,403.70	977,054.22
		950,000.00	181,500.00	272,691.32	3,432,171.85

AT THE CLOSE OF BUSINESS NOV.30, 1899.

RESOURCES									
Banking House Furniture and Fixtures.	Other Real Estate.	Suspense Account.	Judg- ments.	Ex- pense.	Cash Items.	Due From Banks.	Cash.	Revenue Stamps.	TOTAL.
5,500.00	45,351.99	794.25	7,644.78	.....	6,852.87	106,837.13	60,237.00	.....	803,459.80
4,250.00	.....	1,105.50	.....	.....	.....	91,321.19	8,589.33	.....	233,286.39
19,293.13	.....	.....	.....	.....	1,960.51	11,446.66	26,987.59	287.82	387,145.43
8,739.24	.....	.....	.....	.....	582.75	38,510.25	18,976.53	.....	215,462.47
1,500.00	12,350.00	.....	.....	.....	.....	12,321.40	5,118.60	.....	77,256.89
2,348.55	6,033.18	534.97	765.06	3,979.86	10,200.49	82,350.21	42,760.39	.....	562,963.71
529.95	.....	.....	.....	.....	5,123.07	359,035.11	138,714.16	.....	1,414,874.20
12,163.40	.....	.....	.....	.....	496.69	21,560.75	6,655.65	440.10	281,763.37
812.50	.....	.....	.....	1,257.55	.....	37,039.77	9,349.89	.....	165,032.95
1,197.22	3,040.59	83.55	1,061.65	.....	.....	18,868.77	12,958.65	.....	92,133.13
3,714.04	.....	1,209.48	.....	.....	.....	18,868.30	12,958.65	.....	92,133.13
.....	.....	.....	.....	.....	1,152.95	238,222.76	18,875.26	.....	498,737.06
7,421.54	54,408.35	.....	.....	.....	4,892.76	185,914.31	260,509.44	.....	1,104,449.31
77,823.61	35,432.92	.....	4,110.42	.....	45,243.63	863,172.86	422,737.94	.....	3,000,938.51
145,293.18	156,617.04	3,727.75	13,581.91	5,237.41	76,688.22	2,081,557.63	1,038,484.88	727.92	8,902,340.14
LIABILITIES.									
Public Deposits.	Demand Cer- tificates.	Time Cer- tificates.	Certified Checks.	Cash- ier's Checks.	Due to Banks.	Bills Payable.	Savings Deposits.		TOTAL.
102,829.23	9,023.28	156,779.32	4,117.97	3,600.06	9,634.79	.....	.....	.....	803,459.80
56,658.82	30,594.29	16,000.00	.....	.....	.....	.....	.....	.....	233,286.39
65,613.27	72,394.21	.....	.....	.....	90,847.38	.....	.....	.....	387,145.43
60,679.37	14,802.39	.....	.....	334.75	4,152.63	.....	.....	.....	215,462.47
13,432.86	6,542.86	9,420.55	.....	.....	1,034.18	.....	.....	.....	77,256.89
135,970.64	9,238.76	103,576.22	95.00	370.03	3,973.09	.....	.....	.....	562,963.71
242,349.25	75,186.04	.....	269.38	3,550.82	447,339.14	.....	.....	.....	1,414,874.20
10,197.16	8,463.31	69,999.40	.....	.....	.....	25,000.00	.....	.....	281,763.37
4,075.46	3,049.58	35,711.75	.....	.....	1,865.55	.....	.....	.....	165,032.95
.....	11,101.06	769.54	.....	.....	13,291.74	.....	.....	.....	92,133.13
.....	15,559.22	.....	.....	.....	.....	.....	.....	.....	64,836.92
32,314.81	37,611.89	.....	.....	.....	2,160.32	.....	.....	.....	498,737.06
.....	203,264.46	.....	1,000.00	1,687.42	5,174.85	.....	52,288.28	.....	1,104,449.31
574,961.48	119,927.22	316,750.95	300.00	169.00	20,872.44	.....	747,499.50	.....	3,000,938.51
299,582.35	616,758.57	709,007.73	5,782.35	9,712.08	600,346.11	25,000.00	799,787.78	.....	8,902,340.14

## Production of Coal and Coke.

### PRODUCTION OF COAL AND COKE FOR THE YEAR 1898 BY COUNTIES.

COUNTY.	Coal produced.	Total value.	Tons of Coal used in Making Coke.	Tons of Coke Produced	Total Value.	No. of Ovens.
Carbon .....	271,546	\$392,084.20	.....	.....	.....	.....
Cascade .....	993,161	a 658,195.15	20,552	9,209	45,399.69	100.00
Choteau .....	1,130	2,260.00	.....	.....	.....	.....
Gallatin .....	62,969	101,550.40	.....	.....	.....	.....
Meagher .....	50	125.00	.....	.....	.....	.....
Park .....	121,565	c 231,814.00	102,860	61,026	484,425.00	118.00
Total .....	1,450,421	\$1,386,023.75	123,412	70,235	529,824.69	218.00

a Does not include the value of 384,930 tons.

b Does not include the 20,552 tons made into coke.

c Does not include the value of 13,107 tons.

### PRODUCTION OF COAL AND COKE FOR THE YEAR 1899 BY COUNTIES.

COUNTY.	Coal produced.	Total value.	Tons of Coal used in Making Coke.	Tons of Coke Produced	Total Value.	No. of Ovens.
Carbon .....	325,774	\$440,932.00	.....	.....	.....	.....
Cascade .....	893,605	1,346,526.25	22,688	10,546	62,096.74	100.00
Choteau .....	1,370	2,740.00	.....	.....	.....	.....
Custer .....	1,042	1,634.00	.....	.....	.....	.....
Fergus .....	2,787	5,798.00	.....	.....	.....	.....
Gallatin .....	56,271	94,074.45	.....	.....	.....	.....
Granite .....	47	141.00	.....	.....	.....	.....
Lewis and Clarke .....	50	212.50	.....	.....	.....	.....
Meagher .....	50	125.00	.....	.....	.....	.....
Park .....	b 127,775	334,702.00	117,897	48,526	339,682.00	118.00
Totals .....	1,408,771	\$2,226,885.20	140,586	59,072	401,778.74	218.00

a Does not include 22,688 tons made into coke.

b Does not include 117,897 tons made into coke.



## PRODUCTION OF STONE FOR THE YEAR 1898

COUNTIES	GRANITE		LIMESTONE		MARBLE		SANDSTONE		LIME MADE		MISCELLANEOUS	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Carbon.....	b. 200 cu. ft.	\$ 100 00	b. 400 cu. ft.	\$200 00			b. 51'00 cu. ft.	\$2,200 00	340 tons	\$2,800 00	s	\$3,856 86
Cascade.....							m. 500 cu. ft.	250 00	2,960 tons	6,600 00		
Deer Lodge.....					m	\$2,500 00			20 tons	375 00		
Lewis and Clarke.....	b. 3476 cu. ft.	7,462 00					b. 15,000 cu. ft.	3,050 00				
Meagher.....							r. 23,166 cu. ft.	408 00			4,950 cu. ft.	170 00
Yellowstone.....												
Total.....	3676 cu. ft.	\$7,562 00	400 cu. ft.	\$200 00		\$2,500 00	44,266 cu. ft.	\$0,008 00	3,320 tons	9,8 5 00	4,950 cu. ft.	\$4,066 86

## PRODUCTION OF STONE FOR THE YEAR 1899

COUNTIES	GRANITE		LIMESTONE		MARBLE		SANDSTONE		LIME MADE		MISCELLANEOUS	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Carbon.....	b. 4000 cu. ft.	\$1,710 00	L. f. 48,000 tons	\$26,400 00			r.r.b. 6,000 yds.	\$12,000 00	412 tons	\$3,415 00	2,000 cu. ft.	
Cascade.....							f. 3,600 tons	2,160 00	872 tons	5,232 00	c.p. 243 tons	\$972 00
Deer Lodge.....							m.b. 8,200 cu. ft.	3,050 00				
Lewis and Clarke.....	b. 6476 cu. ft.	8,282 00			m. 200 cu. ft.	\$1,000 00			2,400 tons	12,000 00		
Madison.....									140 tons	1,050 00		
Meagher.....							b. 174,250 cu. ft.	23,000 00	16 tons	200 00		
Yellowstone.....							r. 13,500 cu. ft.	750 00				
Total.....	10476 cu. ft.	\$10,022 00	48,000 tons	\$26,400 00	200 cu. ft.	\$1,000 00		\$40,960 00	3,840 tons	\$21,897 00		\$972 00

b—building; s—smelters; m—monumental; f—flux for smelter; c, p—calined plaster; roads; r, r—railroads.

## Clay Products.

### CLAY PRODUCTS FOR THE YEAR 1898

COUNTY	Tracing No.	Common Building Brick	Value	Front Building Brick	Value
	1	880,000	6,160.00	.....	.....
	2	180,000	1,440.00	.....	.....
Total Carbon County .....	..	1,060,000	7,600.00	.....	.....
	3	1,800,000	10,800.00	.....	.....
	4	.....	.....	.....	.....
	5	.....	.....	.....	.....
Total Cascade County .....	..	1,800,000	10,800.00	.....	.....
	6	6,060,000	42,420.00	155,000	2,015.00
	7	7,000,000	56,000.00	250,000	5,000.00
	8	1,366,000	10,930.00	188,000	3,012.80
Total Deer Lodge County ... ..	..	14,426,000	109,350.00	593,000	10,027.80
Total Gallatin County .... .	9	700,000	4,000.00	.....	.....
Total Lewis and Clarke County .....	10	1,800,000	11,700.00	32,000	512.00
Total Missoula County .... .	11	1,000,000	7,500.00	.....	.....
Total Park County .... .	12	420,000	2,400.00	.....	.....
	13	54,000	.....	.....	.....
	14	4,000,000	20,000.00	.....	.....
	15	3,000,000	15,000.00	.....	.....
	16	500,000	3,000.00	.....	.....
	17	11,100,000	71,500.00	.....	.....
	18	1,200,000	6,000.00	.....	.....
Total Silver Bow County .... .	..	9,854,000	115,500.00	.....	.....
Total Yellowstone County .... .	19	75,000	675.00	.....	.....
Grand Total .... .		41,135,000	269,025.00	625,000	10,539.80

## CLAY PRODUCTS FOR THE YEAR 1898—Continued

Alumina Fire Brick	Value	Silica Fire Brick	Value	Feet of Sewer Pipe and Drain Tile	Value	Value of Miscellane- ous Clay Products	Total Amount Expended for Labor
.....	.....	.....	.....	.....	.....	.....	3,200.00
.....	.....	.....	.....	.....	.....	.....	1,246.00
.....	.....	.....	.....	.....	.....	.....	4,446.00
.....	.....	.....	.....	.....	.....	.....	7,900.00
.....	.....	207,709	6,240.66	.....	.....	.....	3,772.89
100,000	3,500.00	.....	.....	.....	.....	.....	1,000.00
100,000	3,500.00	207,709	6,240.66	.....	.....	.....	12,672.89
982,000	37,316.00	516,000	19,608.00	.....	.....	.....	73,795.69
1,250,000	50,000.00	500,000	22,500.00	.....	.....	.....	.....
.....	.....	.....	.....	43,000	989.00	860.00	.....
2,232,000	87,316.00	1,016,000	42,108.00	43,000	989.00	860.00	73,795.69
.....	.....	.....	.....	.....	.....	.....	1,500.00
30,000	1,050.00	.....	.....	45,653	6,173.92	2,888.30	21,360.00
.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	2,000.00
.....	.....	.....	.....	.....	.....	.....	24,000.00
.....	.....	.....	.....	.....	.....	.....	15,000.00
.....	.....	.....	.....	.....	.....	.....	2,400.00
.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	3,000.00
.....	.....	.....	.....	.....	10,000.00	.....	46,400.00
.....	.....	.....	.....	.....	.....	.....	590.00
2,362,000	91,866.00	1,213,709	48,348.66	88,653	17,162.92	3,748.30	160,764.58



## CLAY PRODUCTS FOR THE YEAR 1899

COUNTY	Tracing No.	Common Building Brick	Value	Front Building Brick	Value
	1	500,000	4,500.00	.....	.....
	2	100,000	1,000.00	.....	.....
	3	300,000	2,700.00	.....	.....
Total Carbon County .....	..	900,000	8,200.00	.....	.....
Total Cascade County .....	4	50,000	500.00	.....	.....
Total Custer County .....	5	400,000	3,200.00	.....	.....
	6	900,000	7,200.00	500,000	8,000.00
	7	1,450,000	10,150.00	.....	.....
Total Deer Lodge County .....	..	2,350,000	17,350.00	500,000	8,000.00
Total Fergus County .....	8	300,000	3,000.00	.....	.....
	9	40,000	400.00	20,000	200.00
	10	1,400,000	5,900.00	.....	.....
Total Flathead County .....	..	1,440,000	6,300.00	20,000	200.00
Total Jefferson County .....	11	450,000	4,000.00	.....	.....
Total Lewis and Clarke County .....	12	2,500,000	12,000.00	.....	.....
	13	350,000	2,450.00	.....	.....
	14	1,000,000	7,000.00	.....	.....
Total Missoula County .....	..	1,350,000	9,450.00	.....	.....
Total Ravalli County .....	15	450,000	2,700.00	.....	.....
	16	1,800,000	9,000.00	.....	.....
	17	1,000,000	6,500.00	.....	.....
	18	3,900,000	23,400.00	39,000	390.00
	19	850,000	4,675.00	.....	.....
Total Silver Bow County .....	..	7,550,000	43,575.00	39,000	390.00
Total Yellowstone County .....	20	400,000	2,800.00	.....	.....
	..	18,140,000	113,075.00	559,000	8,590.00



## REPORTS OF SAW MILLS FOR

Tracing No	Number employees			No of weeks mill operated	Amount invested in the industry	Amount of business done	Amount paid for labor	No. of feet of lumber cut	Value of same at mill	Number of shingles produced	Value of same at mill	Number of lath produced
	Male	Female	Total									
1	6	...	6	...	2,400.00	1,200.00	500.00	150,000	1,200.00	.....	.....	.....
2	8	...	8	7	2,000.00	2,300.00	1,400.00	110,000	1,650.00	100,000	250.00	.....
3	18	...	18	24	7 000.00	8,025.00	5,928.00	1,000,000	7,500.00	.....	.....	.....
4	3	...	3	7	1,500.00	600.00	370.00	100,000	1,000.00	75,000	150.00	.....
5	2	...	2	40	300.00	1,000.00	300.00	100,000	1,000.00	.....	.....	.....
6	3	1	4	24	3,500.00	.....	.....	.....	3,000.00	.....	.....	.....
7	35	...	35	4	10,000.00	5,000.00	6,000.00	533,000	4,264.00	.....	.....	.....
8	5	...	5	3	1,800.00	700.00	150.00	70,000	700.00	40,000	100.00	.....
9	5	...	5	3	2,000.00	839.00	231.00	129,000	903.00	.....	.....	.....
10	350	...	350	52	750,000.0	257,000.00	159,161.29	24,780,952	192,052.42	.....	.....	3,932,500
11	5	...	5	2	3,000.00	2,200.00	150.00	100,000	2,000.00	.....	.....	.....
12	5	...	5	16	3,000.00	4,500.00	1,000.00	300,000	3,000.00	.....	.....	.....
13	6	...	6	52	4,000.00	3,500.00	1,750.00	300,000	3,600.00	.....	.....	.....
14	45	...	45	50	14,500.00	46,336.50	29,896.30	2,600,000	16,900.00	.....	.....	.....
15	3	...	3	25	15,000.00	3,100.00	210.00	205,000	3,075.00	.....	.....	.....
16	27	...	27	43	9,000.00	4,000.00	24,000.00	7,000,000	43,000.00	.....	.....	.....
17	3	...	3	40	2,500.00	7,800.00	1,200.00	900,000	7,800.00	.....	.....	.....
18	24	...	24	52	25,000.00	33,000.00	11,571.79	2,600,000	20,000.00	.....	.....	175,500
19	1	...	1	24	1,500.00	3,000.00	470.00	300,000	3,000.00	.....	.....	50,000
20	9	1	10	36	4,000.00	.....	.....	1,000,000	6,000.00	.....	.....	.....
21	10	...	10	26	10,000.00	6,000.00	4,000.00	250,000	3,000.00	.....	.....	.....
22	1	...	1	3	1,000.00	325.00	50.00	20,000	200.00	.....	.....	.....
23	10	...	10	52	60,000.00	100,000.00	10,000.00	500,000	3,500.00	.....	.....	.....
24	5	1	6	30	3,000.00	6,000.00	2,700.00	600,000	4,800.00	.....	.....	.....
589	3	592	615	.....	\$936,000.00	\$496,425.50	261,038.38	43,647,952	333,144.42	215,000	500.00	4,158,000



THE YEAR ENDING JUNE 30, 1900

Value of same at mill	Value of all other products	Number of feet of dressed lumber	Value of same (excluding value of the rough lumber)	Value of sash doors and other manufactures	Condition of business compared with 1898	Cause of suspension
.....	.....	.....	.....	.....	.....	Timber and labor is higher and demand less. Suspended.
.....	400.00	.....	.....	.....	.....	Could not get timber from government to saw.
.....	.....	750,000	525.00	.....	About same .....	.....
.....	.....	.....	.....	.....	About same .....	.....
.....	100.00	.....	.....	.....	About same .....	No sale for lumber..
.....	.....	.....	.....	.....	35 per ct. inc.....	Suspended mill to get logs.....
.....	.....	118,000	118.00	.....	No.....	Erecting new plant in new location ...
.....	.....	20,000	200.00	.....	Good .....	Farming and a log- ging contract .....
.....	.....	.....	.....	.....	Same.....	Otherwork to attend.
4,325.75	.....	6,000,000	7,500.00	25,000.00	About same .....	.....
.....	.....	20,000	200.00	.....	Small inc. ....	No business .....
.....	.....	.....	.....	.....	25 per ct. inc.....	Other work.....
.....	.....	50,000	200.00	.....	20 per ct. inc.....	.....
.....	.....	4,520,000	33,900.00	.....	11 per ct. inc.....	Bad weather and bad roads .....
.....	.....	.....	.....	.....	Good .....	Other work .....
.....	.....	.....	.....	.....	Good .....	.....
.....	.....	50,000	200.00	.....	Same .....	Winter .....
351.00	500.00	2,000,000	.....	.....	Same .....	.....
150.00	.....	50,000	75.00	.....	5 per ct. dec.....	No demand ...
.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	Good .....	.....
.....	.....	.....	.....	.....	30 per ct. inc.....	.....
.....	.....	50,000	10,000.00	.....	15 per ct. inc.....	.....
.....	.....	.....	.....	.....	50 per ct. dec.....	Lack of building.
4,826.75	1,000.00	13,628,000	52,918.00	25,000.00	.....	Prospects of short crops .....

## REPORT OF FLOUR MILLS FOR YEAR ENDED JUNE 30, 1900

Tracing No.	Number employed.	Weeks operated.	Capital invested.	Amount of business done.	Amount paid for labor.	No. of Weeks	No. of bushels of wheat ground.	No. of bushels wheat imported.	Average price of wheat.	Total lbs. of flour produced.	Total lbs. of feed produced.	Capacity of Mill—Barrels.	Per cent of increase over 1899.	Reason for increase or decrease.
1	10	52	20,000	.....	3,000	5	.....	none	55	325,600	162,800	60	Decrease	Loss of crops from frost
2	1	.....	.....	.....	.....	.....	.....	.....	45	.....	.....	12	Not stated	.....
3	25	52	.....	.....	.....	26	450,000	257,000	60	18,000,000	9,000,000	400	Inc. 15 per ct	.....
4	13	30	20,000	30,000	10,000	13	200,000	10,000	60	3,820,000	3,180,000	300	Decrease	Wheat proportionately higher than flour
5	2	.....	20,000	5,000	500	0	5,000	none	65	.....	10,000	60	None	.....

Value of flour produced by three concerns, \$410,800.80; Value of feed produced by three concerns, \$62,221.00; Total, \$473,000.00

## Organized Labor

### And Its Conditions.

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Since issuing the sixth annual report of this bureau, organized labor in the state has not experienced any reverses, nor has it had any conflicts of particular moment, but it has secured, through concerted action, some changes in previous conditions that will prove of inestimable benefit to large number's of its members. One of these conditions is the adoption as an established custom of 6 o'clock closing for mercantile establishments. The rule had been previously adopted in several of the smaller towns of the state, but is now in force as well in Butte, Great Falls and Helena. As a direct result of the organized effort, all of the mercantile forces now have their evenings for rest and recreation, and both the clerical forces and the owners of the mercantile establishments are experiencing and acknowledging the appreciated benefits.

Another step was made in the right direction, and one that will prove the initial effort to a successful conclusion, when Mr. F. Augustus Heinze, for the Montana Ore Purchasing Company, and Senator W. A. Clark, for his properties and industries at Butte, granted their laborers an eight-hour day. During the campaign of the past fall the subject was agitated, and as a result the platform of the Fusion forces—Populists, Democrats and Labor Party—pledged themselves, in case of their election, to secure the enactment of an eight-hour law for all miners and smeltermen, and as these forces were victorious by a very decided majority, and have an equally pronounced majority in the assembly, there could be no doubt that the eight-hour law would be placed upon the state statutes. These forces, according to promise, have at the moment of going to press enacted their pledges into law.

The eight-hour laws that have been enacted by a number of states may be shortly stated, as follows:

**California.**—Eight hours of labor constitutes a day's work, unless it is otherwise expressly stipulated by the parties to a contract. A stipulation that eight hours labor constitutes a day's work must be made a part of all contracts to which the state or any municipal corporation therein is a party. But in the case of drivers, conductors and gripmen of street-cars for the carriage of passengers, a day's work consists of twelve hours. Employment of minor children for more than eight hours per day is absolutely prohibited, except in vinicultural or horticultural pursuits, or in domestic or household occupations.

**Colorado.**—Eight hours constitutes a day's work for all workmen employed by the state, or any county, township, school district, municipality or incorporated town.



**Connecticut.**—Eight hours of labor constitute a legal day's work, unless otherwise agreed.

**District of Columbia.**—Eight hours constitute a day's work for all laborers or mechanics employed by or on behalf of the District of Columbia.

**Idaho.**—Eight hours' actual work constitute a lawful day's work on all state and municipal works.

**Illinois.**—Eight hours constitute a legal day's work in all mechanical employments, except on farms, and when otherwise agreed; does not apply to service by the day, week or month, or prevent contracts for longer hours.

**Indiana.**—Eight hours of labor constitute a legal day's work for all classes of mechanics, workingmen and laborers, excepting those engaged in agricultural and domestic labor. Overwork by agreement and for extra compensation is permitted. The employment of persons under fourteen years of age for more than eight hours per day is absolutely prohibited.

**Kansas.**—Eight hours constitute a day's work for all laborers, mechanics, or other persons employed by or on behalf of the state, or any county, city, township, or other municipality.

**Nebraska.**—Eight hours constitute a legal day's work for all classes of mechanics, servants and laborers, except those engaged in farm or domestic labor.

**Missouri.**—Eight hours constitute a legal day's work. The law does not prevent an agreement to work for a longer or a shorter time, and does not apply to laborers and farm hands in the service of farmers, or others engaged in agriculture.

**Montana.**—Eight hours constitute a legal day's work for persons engaged to operate or handle any first-motion or direct-acting hoisting machine, or any geared or indirect-acting hoisting engine at any mine employing fifteen or more men underground when the duties of fireman are performed by the person so engaged; also for any stationary engineer, operating a stationary engine developing fifty or more horse-power when such engineer has charge or control of a boiler or boilers in addition to his other duties. The law applies only to such steam plants as are in continuous operation, or are operated twenty or more hours in each twenty-four hours, and does not apply to any persons running any engine more than eight hours in each twenty-four for the purpose of relieving another employe in case of sickness or other unforeseen cause. Also, since the recent enactment, underground miners and smeltermen are restricted to eight hours.

**New Jersey.**—Eight hours constitutes a day's labor on any day whereon any general or municipal election shall be held.

**New York.**—Eight hours constitute a day's work for mechanics, working men and laborers, except in farm or domestic labor, but overwork for extra pay is permitted. The law applies to those employed by the state or municipality, or by persons contracting for state work.

**Ohio.**—Eight hours shall constitute a day's work in all engagements to labor in any mechanical, manufacturing or mining business, unless otherwise expressly stipulated in the contract. But in case of conductors, engineers, firemen or trainmen of railroads, a day's work consists of ten hours.

**Pennsylvania.**—Eight hours shall be deemed and held to be a legal day's work in all cases of labor and service by the day where there is no agreement or contract to the contrary. This does not apply to farm or agricultural labor by the year, month or week, to labor in factories, laundries and renovating establishments, or to labor on street railways.

Eight hours out of the twenty-four shall make and constitute a day's labor in penitentiaries and reformatory institutions receiving support from the state, also for all mechanics, workmen and laborers in the employ of the state, or of any municipal corporation therein, or otherwise engaged on public works; this shall be deemed to apply to mechanics, workingmen or laborers in the employ of persons contracting with the state, or any municipal corporation therein, for the performance of public work.

**Utah.**—Eight hours constitutes a day's work upon all public works and in all underground mines or workings, smelters, and all other institutions for the reduction or refining of ores.

**Wisconsin.**—In all engagements to labor in any manufacturing or mechanical business, where there is no express contract to the contrary, a day's work shall consist of eight hours; but the law does not apply to contracts for labor by the week, month or year. In all manufactories, workshops or other places used for mechanical or manufacturing purposes, the time of labor of children under the age of eighteen, and of women employed therein, shall not exceed eight hours in the day.

**Wyoming.**—Eight hours' actual work constitute a legal day's work in all mines and public works.

**United States.**—Eight hours shall constitute a day's work for all laborers, workmen and mechanics who may be employed by or on behalf of the United States.

The states having laws prohibiting boycotting in terms are Colorado, Illinois and Wisconsin.

The states having laws prohibiting blacklisting in terms are Alabama, Colorado, Connecticut, Florida, Georgia, Illinois, Iowa, Kansas, Minnesota, Missouri, Montana, Nevada, North Dakota, Oklahoma, Utah, Virginia and Wisconsin.

The following states have laws which may fairly be construed as prohibiting boycotting: Alabama, Connecticut, Florida, Georgia, Maine, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, New Hampshire, New York, North Dakota, Oklahoma, Oregon, South Dakota, Texas, Utah, Vermont and Wisconsin.

The following states have laws which may be fairly construed as prohibiting blacklisting: Georgia, Michigan, New Hampshire, New York, Oklahoma, Oregon, Rhode Island and South Dakota.

In the following states it is unlawful for an employer to exact an agreement, either written or verbal, from an employe not to join or become a member of any labor organization, as a condition of employment: California, Colorado, Idaho, Indiana, Massachusetts, Minnesota, Missouri, New Jersey, New York, Ohio and Pennsylvania.

Many of the other nations of the world have adopted laws that are much

more pronounced in favor of those who produce the wealth of the world than have any of the states of this Union. But the laws of New Zealand are the most radically in the laborer's favor. There those who labor are given the first governmental consideration, and the dollar is relegated to second instead of first place; human rights are considered first, and property rights second. The result is, that while there are no special monopoly privileges given, and as a consequence no great corporate fortunes are accumulated in short periods by making the public pay to the corporation owners "all the traffic will stand," there are no tramps within the boundaries of New Zealand, and there is no poverty. To see that all those who are willing to labor are provided work, the government sustains a labor intelligence bureau that has two hundred agents, who keep fully informed of all the labor vacancies, and provide those who offer employment with those who are seeking work. Internal improvements are accomplished under the direction of the government and labor unions, and when there is a surplus of labor on the market it is quickly absorbed by the inauguration of needed public improvements, and in this way, while the public contributes to the support of the government, and pays for the improvements that are made, receiving in return the benefits therefrom, those in need of work are given prompt and well-paid employment, and the money is again circulated through the wisely applied energy and labor of its people. The profit-sharing system has been employed in many of the channels of labor, and has wrought a great improvement in all those who engage in it. The familiar argument that corruption will permeate the government when it engages in the operation of natural monopolies, and the establishment of its internal improvements by day labor instead of through the medium of the contractor, has proved to be a falsity, so far as New Zealand is concerned, and the result would be the same with other nations. As an experiment, and for the purpose of having a direct opportunity to offer employment to the unemployed, the government engaged in farming an extensive tract of land, investing some \$55,000 it to start with, and after five years of experiment, finds that it has been a financial, as well as a social, success. The government reserves the public agricultural and pastoral lands for location by actual settlers, allowing these to locate them under a 999-year lease that requires occupation and cultivation, and it extends aid to the settler in the form of small cash loans that carry 5 per cent. interest, the principal being made payable in five years. This has also proved an entire success, and instead of being a burden to the government, is becoming a source of great revenue. City lots are also held by the government, and are located under similar conditions, except, of course, that instead of cultivation, buildings for actual occupancy must be erected. The government owns the railways, and operates them, and while the country as yet does not afford them anything like the volume of traffic secured by the railways of this country, with 22,000 miles in operation, the wages paid to the employes who operate the lines are about 30 per cent. higher than they are here, where we boast of high prices, and it may be mentioned here that these employes serve but eight hours for a day. The railway fare for first-class service is 3 cents per mile for the shortest distances, and this rate is much lower for long distances. Employes on public



works are given a 25 per cent. reduction on regular passenger rates. The government owns and operates the telegraph, telephone and express lines, and provides the service of these necessities to the people at a cost that is merely nominal as compared with the charges levied by similar corporations in this country, and at the same time each of these institutions produce a handsome net profit for the government. The cost of transmitting a message by wire is, as a sample, 12 cents for a thousand miles, and as a consequence, the per capita number of messages sent by the people of New Zealand is about four times greater than in this country, where intelligence is so general, and demands such immediate and speedy transmittal. To stimulate horticultural pursuits, a box of apples weighing 56 pounds is transported by express 300 miles for 12 cents, and the boxes are returned to the owner without further charge. Larger shipments are taken at a reduced rate. Operating under these conditions, where the laborer is paid the highest wages for his services and given the shortest day's work, and giving the public the most for its money, and in a sparsely settled and undeveloped country, yielding as yet the minimum of traffic—conditions that have brought bankruptcy to many corporation lines of this country—New Zealand last year received a net profit from its railways of \$2,250,000.

The government operates a postal savings bank system where deposits from the smallest sum to \$2,500 may be made, and the deposits of these institutions last year amounted to \$45 for every man, woman and child in the country. The public schools rank with the best in the world, and the attendance of children between the ages of seven and fourteen is compulsory. Child labor is prohibited. There are 16,000 public schools, and for all children living at a distance, transportation to and from the daily sessions is free. There is no discrimination as to sex in the political affairs of the country, but a person's name is stricken from the poll list on failure to vote, unless a competent excuse is given. Persons over 65 years of age are pensioned. The land and tax laws of the country are formulated with the same regard for the best interests of the greatest number, instead of for the singular interest of invested dollars. Taxes are levied on a sliding scale that moves steadily up as an individual or corporation increases the assessible holdings, so that instead of those who are the least able being made to bear the burden of supporting the government, as in this country, those who are the most able to pay, and who receive a proportionately greater benefit from the government, are made to assume their just proportion of the burden. The government also conducts a life insurance department, and gives the safest insurance at a fraction of the premiums that are levied here. When the change was made a few years ago from the old—our present system—to the new, the government was in debt a quarter billion dollars, and this has been reduced to thirty-five million dollars, and in several years will be wiped out entirely, as the people there have declared that they cannot appreciate that a national debt is a national blessing, when they are forced to pay a heavy interest on the "blessing."

And one of the most beneficent results of governmental ownership and operation of all public utilities and natural monopolies, and the placing of

human rights above property rights, while recognizing fully every just right of the latter, as experienced in New Zealand, has been the elimination of corporate and corrupt influences from the dictation of civic affairs, and the securing of prompt official attention to the voice of the people.

There are but few contests in New Zealand between labor and capital, but when one does occur it is adjudicated under the most comprehensive and competent arbitration laws that mete out exact justice to both disputants, and at the same time reduce the usual loss of such conflicts to a minimum by quickly and authoritatively settling the existing differences.

It is not the intention here to expound the laws or the political or civic policies or institutions of New Zealand, but to merely direct the attention of the organized labor of this state to some of the beneficial achievements that have been secured through the ballot by the intelligent action of a united people who have freed themselves from the traditions and prejudices of the past by acting on the conclusion that if they must bear the burden of supporting a government, they are, each and all of them entitled to receive the accruing benefits, and that they would have, in fact, as well as in theory, a government not only by the people, but truly for the people.

The labor unions of Montana are now in especially strong and prosperous condition, as is indicated by reports of the organizations that appear on following pages. The membership of the several organizations is conservatively placed at twenty thousand, and but a small portion of this membership is idle.

The extent to which the railway companies of the state are employing Japanese has become suddenly alarming, as it gives promise of eventually filling the state with this kind of cheap labor. The direct employment of the Japs by the companies displaces a proportionate number of white laborers, and is detrimental to the best interests of the community in this respect; but the evil will not stop here. When these Oriental employes are discharged, they remain here and become permanent competitors in the field of local labor. If the railway companies continue importing them into the state, it will be but a few years until there will be thousands of Japanese laborers in the state entering into direct competition with our white labor, offering to work for less than a dollar a day in the same field the white laborer demands \$2.50 as a minimum wage, and the evil that will result to the laborer, and to the merchant who receives his profits from the sales he makes to the better-paid white labor, is too apparent to require elaboration.

In an investigation made during the past fall of the number of Japanese employed, 1,968 were found in the service of three railway companies. Of this number the Great Northern employs 1,265, the Northern Pacific 568, and the Oregon Short Line 135. There are no Japs employed by the Great Falls & Canada or the Butte, Anaconda & Pacific. If the investigation had been made six weeks earlier, before the Great Northern and the Northern Pacific discontinued the extensive road-bed improvements that had been in progress during the summer, the work having been suspended on account of the shortage of the wheat crops of Minnesota and North Dakota, fully double the number of Japs would have been engaged along these lines.

The Japs now in the employment of these lines are principally worked on

the sections and on extra gangs doing special road-bed improvement, and on the Great Northern there are a good many employed as wipers in the round-houses.

The railways do not employ the Japs directly, but engage them from Japanese labor contractors, who draw the pay for all the men they have employed by the corporation, and they pay the men direct, and also supply them from a Japanese supply depot located without the state, the railways transporting these supplies free of charge from the supply point, as far east as St. Cloud, Minnesota. C. T. Takashi contracts the greater number of these laborers drawing \$1.15 for the regular employes, and \$1.25 for those engaged on extra gangs, and the laborers receive from the employer from \$1.05 to \$1.15 per day, less the cost of the supplies that have been furnished them, and less 10 per cent. that is paid to the padrone. Working on this basis, the Jap laborer receives between fifteen and twenty dollars per month, clear, for his work. As these laborers are provided with all necessary supplies by the man who sells their labor, they do not yield any support or patronage to the country in which they work except in instances where they run out of supplies, and are forced to procure from the local merchants a temporary supply. They of course, do not yield anything in the line of public revenues, although their presence has been the cause of considerable public expenditure in several instances during the summer.

While engaged at work on the railways the Japanese live in tents, the rudest board shanties and boarding cars—the latter being exceptional—and they board themselves and provide their own limited culinary outfit.

There are few among these foreign laborers who can speak our language, and as a consequence there are many disagreements and misunderstandings between the gangs and their respective white bosses. To adjust these differences, the contractor sends out Japs who can speak English to visit places where differences have been reported, and if an amicable settlement cannot be secured through his mediations, the disgruntled crew is replaced with a new set of Japs. One of the disadvantages of the situation, from the standpoint of the boss, is that he is not allowed to discharge any of the men, but must make a report of any difficulty that arises and await the adjudication through the company and the contractor and the English-speaking mediator. In these cases the boss is often found, or decided to be, at fault, and as a consequence, loses his position, while the disagreeing Jap holds the fort. This fact has materially lessened the reports that are being sent into headquarters by the bosses, they preferring to tell the Jap gang what to do and let them do as they please, to attempting to enforce their orders or drive the work, and lose their positions for their pains. The Japs are hard to handle, as they will sulk if asked to hurry, and when they take a fit of this character are liable to remain in their bunks the next day, and no amount of persuasion or bluffing will get them out to work, and if any form of coercion is attempted, they do not hesitate to assault the foreman, in several instances having inflicted serious injury and in others having failed to do so only because the boss has beaten a hasty retreat.

When working near the towns the Japs are inclined to patronize the



saloons in a limited way, but as the average habitue of these resorts is not any too particular as to the quality of courtesy he extends to the Oriental patron, the advances of civilization made in this direction have not been marked, nor has this branch of industry received any considerable portion of the Jap's hard-earned pittance.

At several points in the state railway companies have found it politic to defer to public opinion, and have withdrawn the Japanese laborers.

It was the evident intention of the Great Northern, originally, to employ Japanese exclusively in all branches of its extended service, but their inability to understand directions given in English, the fact that they are physically unable to perform the work of some of the heavier lines, and that in places where skill was required in the exact and intelligent performance of every duty, the foremen refused to accept their assistance, has disarranged the plan, and temporarily at least, their employment is confined to the lines mentioned. The Great Northern is the only line that is employing Japs in the round-houses.

There is no doubt, however, that the railways intend to force the Japs into every position as rapidly as they can be fitted to perform the required duties, and as rapidly as this plan is accomplished, white labor will be displaced.

The employment of Japanese by these public carriers is a subject that merits the serious attention of every citizen of the state, as every public and private interest must suffer just in proportion to the number of places they usurp.

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### THE STRIKE AT RED LODGE.

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The following report of the strike at Red Lodge last spring is made to the bureau by Mr. Reece Davis: "I will submit a report, and in doing so, will try to give justice to all parties concerned. One year ago last September a change took place in the management of the Rocky Fork mine. The new superintendent, Mr. Franklin, of Pennsylvania, one of those theory miners without practice, undertook to change the system of working the mines from pick work to machine work, and all men were paid days' wages for the same. Under the old system all men received 75 cents per ton in the No. 4 vein, and 90 cents in the No. 6 vein, and were doing very well. Now, Mr. Franklin, under his system of machine mining, pays all machine men \$3.25 per day and loaders the same; and the output decreased in place of increased till the amount of coal dropped from 1,000 tons to about 600 tons per day. Now, Mr. Franklin claimed the machines were a success, and it was known to every practical miner in Red Lodge that they were a complete failure. On the 28th day of last February Mr. Franklin, the superintendent, in the night, posted up a notice that a new schedule would go into effect on the 15th of March, which meant a reduction of about one-half in the wages of the men.

"Now, never in the history of the west has a body of laborers been asked to submit to such a reduction when the necessities of life have been contin-

ually advancing in price. Under the old system, men working in rooms received 75 cents per ton for blasting coal off the solid. They timbered their own rooms, furnished their own powder and all other supplies. For eighteen months they had been experimenting with mining machinery, and failed to make it a success. The time for experimenting had expired, and in order that the machines may stay, the men must submit to a sweeping reduction in wages to the starvation point.

"On the 15th of March, when the new schedule was to take effect, not a man went to work. The strike was on, and as soon as the news reached the New York office of the Rocky Fork Coal Company the majority of the stockholders offered to sell out their stock to the minority stockholders, an offer they gladly accepted. The mine is now owned by the Northern Pacific Railway Company, and Mr. Busch, of Rossland, Washington, was elected vice president, and Mr. Robert Pettigrew, of the same place, was chosen as superintendent. Both these men are practical miners, and have returned to the old system, and old prices of working, and in several cases the wages have been advanced.

"When they were ready to start to work on the mines again they notified the Union. A special meeting was called, at which Mr. Busch, Mr. P. Pettigrew and Mr. P. O'Shea appeared in person, and submitted the schedule, which was accepted, and work resumed on the 20th day of April, under a schedule and rules satisfactory to all.

"No more machine men need apply in this camp for employment. From all appearances we have a bright future before us, and it is thought five or six hundred men will soon be at work here.

"Red Lodge, Montana, May 15th, 1900."

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## THE LABORER AND THE MINES.

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The thousands who work in the mines of the state have been afforded added protection under the new enactments of the last Assembly. Mr. John Byrne, State Mine Inspector, in his current report says that the law providing for the equipment of hoisting cages with doors or gates to be closed when men are being lowered into or hoisted out of the mines, the validity of which was contested in the courts by the Anaconda Copper Mining Company, was sustained by the Supreme Court of the State in a decision handed down on January 29th. Immediately following all shafts coming within the provision of this law were equipped in accordance with it. I surmise that there are yet a few mine officials who are not disposed to view the device contemplated by this statute as one which provides effectually against that character of accidents it is designed to prevent. This idea regarding the efficiency of the contrivance is doubtless due to opinions formed long before it was given a trial, and the hostility manifested against its adoption resulted more from an anticipated inconvenience than from a well-founded objection to its pretensions as a life-saving measure. Now that the law is in force, all prejudice against it should cease, and no effort should be spared to extract from it what-

ever of good it may contain by strictly complying with its purpose. Otherwise, the bias of a mine officer may tend to deprive the employes of the protection it affords them by showing a careless or indifferent spirit towards it. I do not now, nor do I expect to find such a disposition in men having charge of property that is affected by this act who are governed by the best interests of the owners because, next to the miners, the owners are most interested in its observance by reason of the possible liability for damages in case of accident to employes while riding through shafts. The Supreme Court has sustained the law.

During the year 47 fatal accidents occurred, 40 of which were in the metal mines and seven in the coal mines. Investigation into the various causes from which these deaths resulted shows that at least half of them could have been avoided by the exercise of ordinary prudence on the part of the deceased. A fair proportion of the others were no doubt unavoidable. To the indifferent methods and contempt of an organized and regulated system on the part of some managements may justly be attributed the remainder of the fatalities. As a matter of fact, all our large mines are provided quite generously with the means necessary to make safe conditions and provide against accident, but of what use are they unless their use is systematically insisted on by those in authority. For instance, after a fall of rock has occurred in a stope or drift, killing or injuring one or more of the miners, the place is visited by the superintendent or foreman, who makes a thorough examination of the conditions, and in the great majority of instances, will order the place permanently timbered, if sufficient ground is out to allow of it being done; and if not, then order that timbers of a temporary character be set up until room is made for the permanent sets. Now, it often happens that some one of the mine officials has passed through that place a short time prior to the accident, and after a superficial examination, went on his way oblivious to pending danger, and is greatly astonished when he learns of what has occurred, the thought never presenting itself that he is in any way responsible; and even after the scene of disaster has been visited by the higher officials and orders issued then which, if given in the first place, would have saved a life or prevented an injury. The apparent dereliction of duty passes unnoticed, they usually excusing themselves with the expression that "The men should know enough to take care of themselves." This idea is only partly right, and only so far as it is right, do I approve of it; but before adopting it as a rule of practice, I would suggest that in selecting men to conduct the affairs of our large mines only those be chosen who are capable of hiring men having such qualifications, or possessing judgment sufficient to determine within a reasonable time whether the employes have the ability to properly take care of themselves without advice or instruction from those in charge.

One of the chief causes of accidents in the large mines, and the one tending most to nullify the best intended plans of the owners for the protection of the miners, is the lack of a uniform policy of administration and diversity of purposes sought to be accomplished between the superintendent and foreman on the one hand and the shift bosses on the other. The superintendent and foreman as a rule try not to lose sight of the condition of the mine while



bending every effort to secure the best results in production; yet, the shift boss is animated solely by a desire to mine and hoist the greatest possible tonnage, regardless, to a certain extent, of the conditions as to timbering, etc., of the working places, and as a rule a rivalry exists between the bosses on respective shifts, each trying to add to his reputation by hoisting more tons than the "other fellow." The effect of such methods tend naturally to increase the hazard of the miner, and cannot even be justified as profiting the owner, because it is destructive of his best interests.

An earnest effort has been made to improve the methods of storing and thawing powder underground. Every wooden box and every apparatus constructed of wood, in which the heat was furnished by a candle, found duty as a thawing device was condemned, and an apparatus made of some metallic substance constructed to furnish the required heat by hot water contained within it, was recommended. Of the sixteen fatal accidents resulting from explosions, none is chargeable to explosions from magazines or thawing devices. The following summary shows the cause of accidents:

Explosion of blasting compounds.....	16
Falls of rock .....	10
Falling coal .....	2
By cages in shafts .....	6
Falling down shaft .....	3
Falling down upraise .....	1
Falling from bucket while being hoisted .....	2
Falling down ore chute .....	1
Suffocated by powder gas .....	3
Material falling down shaft .....	1
Crushed by mine car .....	2
Total .....	47

The coal mining industry of the state has developed sufficiently, both in the number of mines and the men engaged in them, to justify a larger share of attention from this department than is possible with the present force. Besides an increase in the number of mines, the workings of those that have been in operation for a number of years past, have become very extensive, several of them aggregating a length of from 20 to 30 miles in haulage roads, entries, air courses and rooms. The ventilation, so essential to the coal miner, and proper maintenance of such vast systems of workings should be given the attention by the state that their importance demands. Quarterly inspections should be made by a competent officer who would at all times effectually apply the laws and regulations governing coal mines. In order to provide this need, I urgently recommend that the present law be amended by providing two deputies for this department, one of whom shall be a qualified coal miner.

The following exhibits the number of mines inspected, the number of men employed, and the number of fatal and non-fatal accidents during the past eight years.

## SEVENTH ANNUAL REPORT OF BUREAU

YEAR.	Mines In- spectd	Men Em- ployed.	Fatal Accidents.	Non-fatal Accidents.	Total Accidents.	Number of Fatal Ac- cidents per 1,000 Men Employed.
1893...	56	5,312	29	4	33	5.45
1894 .....	78	7,082	27	19	46	3.81
1895 .....	88	8,758	41	18	59	4.67
1896 .....	78	7,727	64	21	85	8.28
1897 .....	130	9,825	52	29	81	5.29
1898 .....	136	11,096	48	29	77	4.32
1899 .....	165	12,316	49	22	71	3.97
1900 .....	163	13,996	47	35	82	3.36

## DETAILED STATEMENT OF ACCIDENTS.

Date	Name.	County.	Name of Mine.
1899			
Dec. 6..	John Kieilty .....	Silver Bow .....	Diamond .....
16..	Thos. Martin.. .....	Cascade .....	A. C. M. Co., Belt...
17..	Michael Driscoll .....	Silver Bow .....	Never Sweat .....
24..	Pat Joyce .....	Silver Bow .....	St. Lawrence .....
30..	Ed. Perrow .....	Silver Bow .....	Parrot .....
1900			
Jan. 6..	Thos. Bilbow .....	Silver Bow .....	Never Sweat .....
6..	Mike Piano .....	Silver Bow .....	Never Sweat .....
13..	Thos. Smith .....	Silver Bow .....	Mountain Con No. 1
13..	Mike Sullivan .....	Silver Bow .....	Mountain Con No. 1
14..	Fred Buslett .....	Silver Bow .....	A. C. M. Co., Belt..
14..	J. H. Maxwell .....	Silver Bow .....	Colusa-Parrot .....
14..	J. Milnovich .....	Silver Bow .....	Colusa-Parrot .....
Feb. 3..	John Brown .....	Madison .....	Clipper .....
3..	J. Gries .....	Madison .....	Clipper .....
14..	B. Wilkins .....	Carbon .....	Gebo .....
16..	D. H. Brooks .....	Carbon .....	Bridger .....
22..	Henry Jeffery .....	Silver Bow .....	Moose .....
23..	Milton Keller .....	Silver Bow .....	Moonlight .....
Mar. 24..	Jerry Murphy .....	Silver Bow .....	Parrot .....
Apr. 6..	James Lewis .....	Park .....	Sowash .....
23..	Nelson Leclair .....	Granite .....	Granite-Bi-Metallic .
28..	Nelson Larson .....	Fergus .....	Iron Chancellor .....
May 13..	Ole Mohlstad .....	Lewis and Clarke ..	Bald Mountain .....
June 10..	Ed Fogarty .....	Silver Bow .....	Never Sweat .....
11..	Ed Cavanaugh .....	Silver Bow .....	Mountain Con. No. 1
14..	P. C. Duncan .....	Silver Bow .....	Gagnon .....
27..	Ed. Young .....	Silver Bow .....	Original .....
July 19..	M. L. Dunlevy .....	Silver Bow .....	Anaconda .....
24..	Thos. Cashion .....	Silver Bow .....	High Ore .....
Aug. 3..	Thomas W. Thomas .....	Park .....	Mont. Coal and Coke
4..	Pat Murphy .....	Silver Bow .....	Diamond .....
Sept. 14..	John Kelly .....	Silver Bow .....	Stewart .....
14..	J. J. Murray .....	Silver Bow .....	Stewart .....
25..	O. Anderson .....	Gallatin .....	Mountain Side .....
28..	J. W. Slater .....	Jefferson .....	Eva May .....
Oct. 1..	Ber. McDonald .....	Silver Bow .....	Smokehouse .....
11..	S. L. Fuller .....	Silver Bow .....	Old Joe .....
13..	James Gayler .....	Madison .....	Kennet .....
14..	Dan Buckley .....	Silver Bow .....	Diamond .....
29..	J. T. Drummey .....	Silver Bow .....	Rose .....
29..	W. C. Whitmore .....	Silver Bow .....	Smokehouse .....
29..	Chas. Blackie .....	Silver Bow .....	Smokehouse .....
29..	Robt. Campbell .....	Silver Bow .....	Smokehouse .....
29..	Thos. Glendennon .....	Lewis and Clarke ..	Lucky Joe .....
30..	Guissippe Morello .....	Silver Bow .....	B. & M. Shaft No. 5
Nov. 3..	Joseph Delhanty .....	Cascade .....	Cottonwood Coal Co.
18..	John Eagan .....	Madison .....	Strawberry .....

## State Bureaus of Agriculture, Labor and Industry.

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United States Department of Labor, established 1884, Commissioner, Carroll D. Wright, Washington, D. C.

**California.**—Bureau of Labor Statistics, established 1883, Commissioner, John S. Enos, San Francisco.

**Colorado.**—Bureau of Labor Statistics, established 1887, Commissioner, C. J. Driscoll, Denver.

**Connecticut.**—Bureau of Labor Statistics, established 1873, Commissioner, Samuel J. Starr, Hartford.

**Idaho.**—Bureau of Agriculture and Industrial Statistics, established 1895, Commissioner, J. A. Czizek, Boise City.

**Illinois.**—Bureau of Labor Statistics, established 1879, Commissioner, F. H. B. McDowell, Springfield.

**Indiana.**—Bureau of Statistics, established 1897, Commissioner, John Collett, Indianapolis.

**Iowa.**—Bureau of Labor and Industrial Statistics, established 1884, Commissioner, E. R. Hutchins, Des Moines.

**Kansas.**—Bureau of Labor and Agricultural Statistics, established 1885, Commissioner, Frank H. Betton, Topeka.

**Kentucky.**—Bureau of Agriculture, Labor and Statistics, established 1876, Commissioner, Lucas Moore, Frankfort.

**Louisiana.**—Bureau of Statistics of Labor, established 1900, Commissioner, Thomas Harrison.

**Maine.**—Bureau of Agricultural and Industrial Statistics, established 1887, Commissioner, Samuel W. Mathews, Augusta.

**Montana.**—Bureau of Agriculture, Labor and Industry, established 1893, Commissioner, J. H. Calderhead, Helena.

**Maryland.**—Bureau of Industrial Statistics, established 1884, Commissioner, Thomas A. Smith, Baltimore.

**Massachusetts.**—Bureau of Statistics of Labor, established 1869, Commissioner, Horace G. Wadlin, Boston.

**Michigan.**—Bureau of Labor and Industrial Statistics, established 1883, Commissioner, Joseph L. Cox, Lansing.

**Minnesota.**—Bureau of Labor, established 1887, Commissioner, Martin F. McHale, St. Paul.

**Missouri.**—Bureau of Labor Statistics and Inspection, established 1879, Commissioner, Thomas P. Rixey, Jefferson City.

**Nebraska.**—Bureau of Labor and Industrial Statistics, established 1887, Commissioner, John Jenkins, Lincoln.



**New Jersey.**—Bureau of Statistics, Labor and Industries, established 1878, Commissioner, William Stainsby, Trenton.

**New Hampshire.**—Bureau of Labor, established 1893, Commissioner, Lysander H. Carfoll, Concord.

**New York.**—Bureau of Labor Statistics, established 1883, Commissioner, John McMakin, Albany.

**North Carolina.**—Bureau of Labor Statistics, established 1887, Commissioner, B. R. Lacy, Raleigh.

**North Dakota.**—Department of Agriculture and Labor, established 1889, Commissioner, H. U. Thomas, Bismarck.

**Ohio.**—Bureau of Labor Statistics, established 1877, Commissioner, M. D. Ratchford, Columbus.

**Pennsylvania.**—Bureau of Industrial Statistics, established 1872, Commissioner, James M. Clark, Harrisburg.

**Rhode Island.**—Bureau of Industrial Statistics, established 1887, Commissioner, Henry E. Tiepke, Providence.

**Tennessee.**—Bureau of Labor Statistics and Mines, established 1891, Commissioner, R. A. Shifflet, Nashville.

**Virginia.**—Bureau of Industrial Statistics, established 1898, Commissioner, James B. Doherty, Richmond.

**Washington.**—Bureau of Labor, established 1897, Commissioner, W. C. P. Adams, Olympia.

**Wisconsin.**—Bureau of Labor Statistics, established 1883, Commissioner, Halford Erickson, Madison.

**West Virginia.**—Bureau of Labor, established 1889, Commissioner, I. V. Barton, Wheeling.

During the past two years there have been a number of bureaus established in foreign countries that will be devoted to industrial, agricultural and labor statistics and interests.

# DIRECTORY OF LABOR ORGANIZATIONS IN MONTANA JUNE 30, 1900.

NAME OF ORGANIZATION.	Town or City.	County.	Date of Organization.	Elect Officers.	Date of Meetings.	VOLUNTARY AND STIPULATED BENEFITS.					
						Are Benefits Voluntary.	Are Benefits Stipulated.	Amount Paid per week.	For How Many Weeks.	For Funeral Expenses.	
										For sickness or disability.	At Death or from total Disability.
										From	To
Western Federation of Miners.											
Aldridge Miners Union No. 57.	Butte.	Silver Bow.	May 19, 1893.	May each year.	1st Monday in May	Yes	Yes	\$ 5 00	20	\$25 00	\$100
Basin Miners Union No. 23.	Aldridge.	Park.	April 19, 1897.	1st Sat. Jan. & July.	Saturday evenings.	Yes	Yes	10 00	10	90 00	
Butte Miners Union No. 1.	Basin.	Jefferson.	May 1, 1894.	1st of Mar. & Sept.	1st & 3d Wed. in mo.	Yes	Yes				
Carbonado Miners Union No. 67.	Butte.	Silver Bow.	June 13, 1898.	March and Sept.	Tuesday evenings.	Yes	Yes	7 00	10	50 00	
Gebo Miners Union No. 78.	Carbonado.	Carbon.	Oct. 6, 1898.	March and Sept.	Tuesday evenings.	Yes	Yes	5 00	10	50 00	
Granite Miners Union No. 4.	Gebu.	Granite.	May 19, 1888.	September.	Sunday evenings.	Yes	Yes	10 00	10	90 00	
Hassel Miners Union No. 35.	Granite.	Broadwater.	Sept. 28, 1898.	1st Tu. Mar. & Sept.	Tuesday evenings.	Yes	Yes	13 00	10	90 00	
Martina Miners Union No. 20.	Hassel.	Missoula.	June 25, 1895.	1st mfg. Sep. & Mar.	Saturday evenings.	Yes	Yes	6 00	52	90 00	50
Red Lodge Miners Union No. 7.	Martina.	Cascade.	Jan. 3, 1898.	March and Sept.	Last eve. of ea. mo.	Yes	Yes	6 00	10	60 00	
Winston Miners Union No. 29.	Nelhart.	Carbon.	May 16, 1890.	March and Sept.	Saturday evenings.	Yes	Yes	7 00	10	60 00	
Winston Miners Union No. 25.	Red Lodge.	Broadwater.	July 18, 1894.	March and Sept.	Sunday evenings.	Yes	Yes	10 00	10	90 00	
Mill and Smelters Union No. 74 W. F. Miners	Butte.	Silver Bow.	Sept. 1, 1892.	1st Wed. Mch. & Sep.	Wednesday evenings.	Yes	Yes				
Order of Railway Conductors.	Great Falls.	Cascade.		March and Sept.	Saturday evenings.	Yes	Yes				
Yellowstone Division No. 191.	Glendive.	Dawson.	March 11, 1888.	1st Wed. in Dec.	1st & 3d Wed. ea. mo.	Yes	Yes			100 00	5000
Black Eagle Division No. 356.	Great Falls.	Cascade.	Aug. 1, 1896.	Dec. each year.	2d & 4th Sun. ea. mo.	Yes	Yes			1000	5000
Montana Division No. 272.	Havre.	Cascade.	Jan. 21, 1891.	Dec. each year.	1st & 2d Sun. ea. mo.	Yes	Yes			1000	3000
Livingston Division No. 371.	Livingston.	Park.	March 17, 1895.	1st meeting in Dec.	1st & 3d Sun. ea. mo.	Yes	Yes	none		1000	5000
Division No. 243.	Missoula.	Missoula.									
Butte City Division No. 29.	South Butte.	Silver Bow.	Oct. 18, 1891.	2d Sunday in Dec.	2d & 4th Sun. ea. mo.						
Brotherhood of Locomotive Engineers.											
Division No. 274.	Butte.	Silver Bow.	June 1, 1885.	1st of June.	1st & 2d Sat. ea. mo.						
Division No. 195.	Forsyth.	Custer.	Sept. 28, 1882.	March 31.	Wed. afternoons.					750	1500
Division No. 594.	Great Falls.	Cascade.	April 1.	April 1.	Sun. afternoons.						
Division No. 499.	Kalispell.	Flathead.	1892.	April.	2d & 4th Wed. ea. mo.						
Brotherhood of Locomotive Firemen.											
Copper City Lodge No. 500.	Anaconda.	Deer Lodge.	Nov. 39, 1896.	2d Wed. in June.	2d & 4th Wed. ea. mo.					500	1500
Silver State Lodge No. 517.	Clancy.	Jefferson.		Last meet g. in June.	Sun. afternoons.					500	1500
Landmark Lodge No. 128.	Glendive.	Valley.	1882.		Sundays.					500	1500
Sun River Lodge No. 456.	Glendive.	Dawson.		Last meet g. in June.	Sunday evenings.					500	1500
Mt. Helena Lodge No. 423.	Great Falls.	Cascade.	1889.	July 1.	1st & 3d Fri. ea. mo.	Yes	Yes	* ex.		500	1500
Lodge No. 182.	Kalispell.	Flathead.		On or before June 30.	Wednesday eve g's.	Yes	Yes			500	1500
Custer Lodge No. 191.	Livingston.	Park.	Dec. 29, 1883.	Last meet g. in June.	1st & 3d Mon. ea. mo.	Yes	Yes			500	1500
Lodge No. 495.	Lima.	Beaverhead.	Dec. 9, 1896.		1st & 3d Wed. ea. mo.	Yes	Yes			500	1500
Lodge No. 194.	Missoula.	Missoula.	April 5, 1885.	1st meeting in June.	Thursdays.	Yes	Yes			500	1500
J. K. Calbreath Lodge No. 264.	South Butte.	Silver Bow.		January 1.	Sunday evenings.						
Brotherhood of Railway Trainmen.				1st meeting in Dec.							
Eagle Butte Lodge No. 328.	Forsyth.	Custer.	1883.								
Sun River Lodge No. 405.	Great Falls.	Cascade.	May 1, 1892.								

\* Expenses. + Optional.

# DIRECTORY OF LABOR ORGANIZATIONS IN MONTANA—CONTINUED, D.

NAME OF ORGANIZATION.	Town or City.	County.	Date of Organization.	Elect Officers	Date of Meetings.	VOLUNTARY AND STIPULATED BENEFITS.					
						Are Benefits Voluntary.	Are Benefits Stipulated.	For sicknes- or disability.		For Funeral Expenses.	At Death or from Total Disability.
								Amount Paid per week.	For How Many Weeks.		
Kalispell Lodge No. 313..... National Park Lodge No. 294..... T. J. Sheahan Lodge No. 293..... International Switchmen's Union: Copper City Lodge No. 45..... International Brotherhood of Electrical Workers: Inter'l Brotherhood Electrical Workers No. 122 Stationary Engineers: Butte Stationary Engineers No. 1..... Geo. Dewey Engineers, W. F. of M. No. 86..... National Ass'n of Stationary Engineers No. 2..... National Ass'n of Stationary Engineers No. 1..... Missoula Union of Stationary Engineers No. 6..... Street Car Men's Unions: Street Car Men's Union of W. L. U. No. 36..... Machinists' Unions: International Ass'n of Machinists No. 88..... International Ass'n of Machinists No. 168..... Typographical Unions: Anaconda Typographical Union No. 255..... Butte Typographical Union No. 120..... Great Falls Typographical Union No. 256..... Helena Typographical Union No. 95..... Missoula Typographical Union No. 277..... Pressmen's Unions: Butte Printing Pressmen's Union No. 21..... Helena Printing Pressmen's Union No. 9..... United Brotherhood Carpenters and Joiners of Amer. Local No. 88..... Local No. 256..... Local No. 112..... Local No. 345..... Local No. 286..... Local No. 28..... Cigar Makers' International Union: No. 275..... No. 361..... No. 362..... No. 375.....	Kalispell..... Livingston..... Missoula.....  South Butte  Butte..... But										

† No limit.



NAME OF ORGANIZATION.	Town or City.	County.	Date of Organization.	Elect Officers.	Date of Meetings.	VOLUNTARY AND STIPULATED BENEFITS.					
						Are Benefits Voluntary.	Are Benefits Stipulated.	Amount Paid per week.	For How Many Weeks.	For Funeral Expenses.	
										From	To
Iron Moulders:											
No. 309.....	Anaconda.....	Deer Lodge.....	Jan. 2, 1892.....	June and Dec.....	1st & 3d Fridays.....	Yes	Yes	5 00	13	100	100
No. 276.....	Butte.....	Silver Bow.....	Aug. 22, 1890.....	Jan. and July 1.....	2d & 4th Tuesdays.....	Yes	Yes	.....	.....	100	.....
Barbers' Protective Union, W. L. U.:											
No. 23.....	Anaconda.....	Deer Lodge.....	Aug. 2, 1898.....	Dec. and July.....	1st & 3d Tuesdays.....	Yes	Yes	.....	.....	.....	.....
No. 2.....	Butte.....	Silver Bow.....	June 15, 1895.....	1st mtg Dec. & June.....	Every oth. Sat. afn.....	Yes	Yes	.....	.....	.....	.....
Granite Cutters' Unions:											
Butte Branch.....	Butte.....	Silver Bow.....	April 1, 1898.....	Feb. and Aug.....	4th Sun. each mo.....	Yes	Yes	.....	.....	125	.....
Helena Branch.....	Helena.....	Lewis & Clarke.....	....., 1889.....	Semi-annually.....	3d Sat. eve'gen, mo.....	.....	.....	.....	.....	.....	.....
Bricklayers and Masons' Internat'l Unions:											
No. 2.....	Anaconda.....	Deer Lodge.....	Oct. 8, 1892.....	June and Dec.....	Every Tuesday.....	Yes	Yes	7 00	.....	100	.....
No. 3.....	Great Falls.....	Cascade.....	1891.....	Jan. 1 and June 1.....	Wednesday eve'gs.....	Yes	Yes	.....	.....	.....	.....
No. 6.....	Helena.....	Lewis & Clarke.....	March 2, 1895.....	1st mtg June & Dec.....	2d & 4th Fridays.....	Yes	Yes	.....	.....	.....	.....
No. 7.....	Missoula.....	Missoula.....	June 30, 1897.....	July and Dec.....	Every two weeks.....	Yes	Yes	.....	.....	.....	.....
Bricklayers' Unions, W. L. U.:											
No. 28.....	Anaconda.....	Deer Lodge.....	Aug. 4.....	July and Dec. 1.....	Friday evenings.....	Yes	Yes	.....	.....	50	.....
Operative Plasterers' International Ass'n:											
No. 69.....	Butte.....	Silver Bow.....	June 1, 1895.....	April 1 and Oct. 1.....	Tuesdays.....	Yes	Yes	.....	.....	50	50
No. 80.....	Helena.....	Lewis & Clarke.....	June 23, 1890.....	Jan. and July.....	1st & 3d Wed.....	.....	.....	.....	.....	50	60
Butchers' Unions:											
Butte Butchers' Union No. 17, W. L. U.:	Butte.....	Silver Bow.....	July 14, 1890.....	1st mtg June & Dec.....	Thursday evenings.....	Yes	Yes	7 00	7	75	.....
Great Falls Butchers' Union No. 1.....	Great Falls.....	Cascade.....	May 31, 1894.....	1st Tu. June & Dec.....	1st & 3d Tuesdays.....	Yes	Yes	.....	.....	.....	.....
Brewers' Unions:											
Local Union No. 66.....	Butte.....	Silver Bow.....	May 15, 1891.....	2d Sun. Apr. & Oct.....	1st & 3d Saturdays.....	Yes	Yes	.....	.....	.....	.....
Branch No. 1 of Local Union No. 66.....	Great Falls.....	Cascade.....	July 17, 1897.....	June and Dec.....	Twice monthly.....	Yes	Yes	.....	.....	.....	.....
Branch No. 2 of Local Union No. 66.....	Anaconda.....	Deer Lodge.....	March 25, 1891.....	2d Sun. Apr. & Oct.....	2d Sunday monthly.....	Yes	Yes	.....	.....	.....	.....
Clerks' Unions:											
Retail Clerks' Union No. 34.....	Billings.....	Yellowstone.....	May 14, 1900.....	1st mtg June & Dec.....	1st & 3d Wed.....	Yes	Yes	.....	.....	50	.....
Butte Clerks' Protective Union No. 13, W. L. U.:	Butte.....	Silver Bow.....	....., 1886.....	June 4.....	Once a week.....	Yes	Yes	7 00	7	75	75
Retail Clerks' Nat. Protective Ass'n No. 57.....	Great Falls.....	Cascade.....	May 1, 1892.....	Jan. 1 and July 1.....	Thurs-day evenings.....	.....	.....	.....	.....	.....	.....
Missoula Clerks' Union No. 85.....	Missoula.....	Missoula.....	Feb. 21, 1900.....	July and Dec.....	2d & 4th Mondays.....	Yes	Yes	.....	.....	.....	.....
Musicians' Unions:											
Musicians' Pro. Union No. 81, A. F. of M.:	Anaconda.....	Deer Lodge.....	Sept. 20, 1898.....	January 1.....	2d Sunday monthly.....	Yes	Yes	.....	.....	.....	.....
Musicians' Mut. Pro. U. No. 39, N. L. of M. of U. S.:	Butte.....	Silver Bow.....	April....., 1893.....	April 1.....	3d Tues. monthly.....	Yes	Yes	.....	.....	100	.....
No. 51, W. L. U.:	Butte.....	Silver Bow.....	May 1, 1900.....	Jan. 1 and July 1.....	3d Tues. monthly.....	Yes	Yes	.....	.....	.....	.....
No. 96.....	Missoula.....	Missoula.....	May 1, 1900.....	Jan. 1 and July 1.....	4th Wed. monthly.....	.....	.....	.....	.....	.....	.....
Plumbers and Gas Fitters' Unions:											
United Ass'n of Jour. Plumbers No. 4.....	Butte.....	Silver Bow.....	Oct. 11, 1889.....	Jan. 1 and July 1.....	.....	Yes	Yes	5 00	15	.....	.....
Building Laborers:											
Bldg. Lab. Int. Pro. Union of America No. 3.....	Anaconda.....	Deer Lodge.....	April 10, 1896.....	April 10, 1896.....	Twice a month.....	Yes	Yes	.....	.....	.....	.....
Bldg. Lab. Int. Pro. Union of America No. 1.....	Butte.....	Silver Bow.....	....., 1892.....	Last mtg ea. quar'r.....	Every Tuesday.....	Yes	Yes	.....	.....	\$ Ex.	.....
Bldg. Lab. Int. Pro. Union of America No. 4.....	Helena.....	Lewis & Clarke.....	April 13, 1899.....	1st mtg June & Dec.....	Every oth. Thur. eve.....	Yes	Yes	.....	.....	.....	.....

§ All expenses.



## Miscellaneous Wage Items.

Gathered From Reliable Sources and Rendered by the Employer.

**Quartz Miners.**—Butte, Basin, Granite, Hassel and Winston pay \$3.50 for a ten-hour day, and Garnett and Philipsburg pay \$3 for a ten-hour day. Hassel and Winston pay car men \$3 for a ten-hour day.

**Coal Miners.**—Aldridge pays \$2.75 for a ten-hour day, and Red Lodge pays \$3 for a ten-hour day. The mines in Cascade county, which produce a greater part of the coal product of the state, pay 90 cents and \$1 a ton, the miners receiving pay for slack when the slack is used, or where there are coke ovens.

**Railway Men.**—Conductors on valley grade receive \$3 per 100 miles, on mountain grade \$4 per 100 miles, and overtime at ten miles per hour. Trainmen receive \$2 per 100 miles on valley grade, \$3 on mountain grade, and overtime at ten miles per hour. Engineers receive on the Northern Pacific \$3, \$3.75, \$4 for 100 miles or 10 hours; on the Great Northern, \$4 for 100 miles or ten hours. Firemen, Clancy division, \$2.65 for 100 miles or ten hours; on this division, 48 miles is counted for 100, if made in 10 hours; if not, time is counted ten miles an hour. On the Great Falls division, firemen receive \$2.30 for 100 miles or ten hours; and South Butte, \$2.50 to \$2.75 for ten hours.

**Printers.**—Day foreman, \$27, night foreman, \$40 per week; compositors, \$24 and \$27; \$25 to \$35 per week.

**Lumbermen.**—At Bonner, not less than \$2 for ten hours' work; Nine Mile, minimum, \$35 per month and board; Missoula, \$2.50 per day.

**Laundries.**—Butte and other cities, men \$18 per week; women \$10 to \$15 per week.

**Clerks.**—Male \$80, female \$50 per month.

**Barbers.**—Butte and Anaconda \$18, Great Falls \$16 per week.

**Carpenters.**—Butte and Anaconda \$4.50 per nine-hour day; Great Falls, \$4 per nine-hour day; Missoula, \$4 per ten-hour day.

**Stationary Engineers.**—Butte and Missoula, \$4 per day; pumpmen, \$4 per day; firemen, \$3.50 per day.

**Granite Cutters.**—Helena, \$4.50 per day.

**Bricklayers.**—Butte, Helena, Anaconda, Great Falls, \$6 per nine-hour day; Missoula, 60 cents per hour.

**Stone Masons.**—Anaconda, \$6; Great Falls, \$5; Butte, \$4 per nine-hour day; Missoula, 50 cents per hour.

**Plasterers.**—Butte, \$4 for an eight-hour day.

**Painters.**—Anaconda and Butte, 45 cents per hour; Great Falls, 40 cents per hour.



**Decorators.**—Anaconda and Butte, 45 cents per hour; Great Falls, 50 cents per hour.

**Brewers.**—Butte, Great Falls and Helena, \$3.50 per day.

**Tailors.**—Butte, \$21 per week.

**Butchers.**—Butte, head shopman, \$90 per month or \$4 per day; in slaughter house, same; delivery men, \$75 per month or \$3 per day.

**Blacksmiths.**—\$4 to \$5 per day.

**Mill and Smeltermen.**—\$3 to \$4.50 per day.

**Quarrymen.**—\$3.50 per day of nine hours and eight hours on Saturday.

**Bakers.**—\$18 to \$25 per week.

The five last are Butte quotations.

CAMPARTIVE AVERAGE WAGES OF EMPLOYES OF FLOURING MILLS FOR YEARS ENDING JUNE 30, AS BELOW

Classification.	1900	1898	1897	1896	1895	1894
Bookkeepers, per month ... ..	\$86 25	\$86 25	\$86 66	\$81 00	\$89 00	\$89 00
Engineers, per month .....	76 44	76 44	77 40	79 66	79 30	82 42
Firemen and asisstant engineers, per day .... ..	2 88	2 88			3 10	
Flour packers, per monh .....	57 46	57 46		60 33	66 75	
Laborers, per month .... ..	55 66	55 60	55 00	52 14	57 10	55 12
Millers, head, per month .....	95 50	95 50	93 54	95 28	108 73	103 80
Millers, second, per month .....	57 16	57 16	62 22	67 85	76 75	76 95
Oilers, per day .... ..	1 96	1 96			2 50	2 00
Wheat buyers, per month .....	72 50	72 50	75 00	75 00	66 75	
Wheat cleaners, per day .....					2 31	2 25
Salesmen, per month .....					100 00	

..... Blank spaces—not rate given.

COMPARTIVE AVERAGE WAGES OF SAWMILL EMPLOYES AS REPORTED BY EMPLOYERS, YEARS ENDING JUNE 30, AS BELOW.

Classification.	1900	1898	1897	1896	1895	1894	1893
Bookkeepers ... ..	\$94 83	\$94 83	\$96 00	\$70 00	\$83 46		
Foremen, per month .... ..	97 65	97 65	98 77	100 00	112 78	\$92 10	\$102 14
Engineers, per month .....	67 83	67 85	69 79	81 76	85 54	87 94	89 09
Laborers, per month .... ..	33 12	33 12	30 31	32 73	35 38	31 71	36 50
Edgers, per month .....	40 16	40 16	41 00	38 75	40 58	80 08	75 14
Off-bearers, per month .... ..	37 50	37 50	36 00	35 75	39 28	64 75	76 00
Teamsters, per month .....	45 60	45 60	48 00	35 04	39 17	41 11	44 19
Ratchet-setters, per month .....	61 00	61 00	60 75	43 12	47 50		
Sawyers, per day .....	3 67	3 67	3 60	3 28	3 51	3 60	3 71
Carpenters, per day .....	3 75	3 75	3 75	3 71	3 46		4 44
Blacksmiths, per day .... ..	3 60	3 60	2 75	2 00	2 84	2 25	2 41
Machinists, per day .....	3 75	3 75	3 75		3 37		2 85
Shingles sawyers, per 1000.... ..				08	08		10
Packers, per 1000 .... ..				08	08		10
Cooks, per day .... ..	2 00	2 00	2 00				
Cook's helper, per day .....	1 20	1 20	1 25				
Choppers, per day .... ..	1 90	1 90	1 75				

## COMPENSATION OF STREET RAILWAY EMPLOYEES JUNE 30, 1900.

Wages of Employes.	From	To
Motormen and conductors .....	\$2 00	\$3 50
Engineers .....	2 25	4 00
Assistant engineers .....	2 00	.....
Electricians .....	2 50	5 00
Machinists .....	4 00	.....
Car repairers .....	2 50	3 50
Track foremen .....	2 50	3 00
Trackmen .....	2 25	3 00
Linemen .....	2 50	3 50
Firemen .....	3 00	3 50
Laborers .....	2 00	3 00

## SHOWING RANGE OF WAGES PAID TO EMPLOYEES IN BRICK YARDS IN MONTANA, YEAR ENDING JUNE 30, 1900.

Occupation.	Low.	High.	Occupation.	Low.	High.
Foremen, per month .....	\$100 00	\$150 00	Wheelers, per day .....	\$2 00	\$3 25
Engineers, per day .....	3 50	4 00	Teamsters, per day .....	2 50	3 00
Firemen, per day .....	2 50	3 00	Dumpers, per day .....	2 25	.....
Burners, per day .....	2 50	4 00	Yardmen, per day .....	3 00	.....
Temperers, per day .....	3 50	4 00	Moulders, per day .....	3 50	.....
Sanders, per day .....	3 50	4 00	Strikers, per day .....	4 50	5 00
Setters, per day .....	3 00	5 00	Laborers, per day .....	4 50	5 00
Truckers, per day .....	2 50	3 00	Sewer pipe makers, per day .....	2 50	4 00

## AVERAGE WAGES OF BREWERY EMPLOYEES AS COMPILED FROM REPORTS OF EMPLOYERS, YEARS ENDING JUNE 30, 1900, ETC.

Occupation.	Average Wages.					
	1900	1898	1897	1896	1895	1894
Foremen .....	\$123 00	\$123 00	\$123 00	\$104 64	\$95 25	.....
Bookkeepers .....	95 00	95 00	97 00	.....	.....	.....
Collectors .....	110 50	110 50	112 50	.....	.....	.....
Engineers .....	120 75	120 75	121 00	94 77	100 00	91 00
Firemen .....	89 00	89 00	88 33	82 00	84 00	.....
Carpenters .....	106 50	106 50	107 50	.....	.....	.....
Coopers .....	97 75	97 75	97 65	82 00	89 85	90 50
Cellar foremen .....	91 00	91 00	91 00	.....	.....	.....
Brewers .....	81 25	81 25	81 28	84 79	80 96	79 11
Bartenders .....	70 15	70 15	80 57	100 56	92 00	92 10
Malsters .....	83 00	83 00	82 90	88 60	89 75	86 66
Kettlemen .....	78 00	78 00	.....	.....	.....	.....
Elevator men .....	72 00	72 00	70 00	73 33	50 00	.....
Bottlers .....	68 00	68 00	67 75	75 00	.....	66 50
Apprentices .....	39 75	39 75	42 50	.....	.....	.....
Warehouse men .....	60 00	60 00	60 00	.....	.....	.....
Drivers .....	70 50	70 50	69 10	75 84	79 35	77 50
Watchmen .....	69 00	69 00	70 00	80 00	.....	75 00
Laborers .....	55 00	55 00	60 45	69 60	50 00	59 50

NOTE.—In certain case where employes received board an allowance of \$20.00 per month is made in making up the average rate of pay.

## SEVENTH ANNUAL REPORT OF BUREAU

AVERAGE WAGES OF FOUNDRY EMPLOYEES JUNE 30, 1896, 1897, 1898 AND 1900  
AS REPORTED BY EMPLOYEES.

Occupation.	1900	1898	1897	1896
Foreman foundry, per month .....	\$151 72	\$151 72	\$156 66	\$161 20
Foreman machinery, per month .....	169 00	169 90	175 00	.....
Pattern makers, per month .....	123 10	123 10	121 66	105 04
Draughtsman, per month .....	141 00	141 00	150 00	125 00
Bookkeepers, per month .....	90 05	90 05	108 33	101 66
Teamsters, per month .....	73 18	73 18	75 00	75 00
Watchmen, per month .....	60 00	60 00	65 00	.....
Machinists, per day .....	3 75	3 75	3 75	3 82
Moulders, per day .....	3 95	3 95	4 00	3 89
Foundry, helpers, per day .....	2 70	2 70	2 83	2 74
Apprentices, per day .....	2 25	2 25	2 25	1 42
Blacksmiths, per day .....	4 20	4 20	4 25	3 91
Cupolo tenders .....	2 75	2 75	3 00	3 00
Head chipper, per day .....	.....	.....	3 25	3 25
Engineers, per day .....	3 45	3 45	3 50	3 13
Core makers, per day .....	3 75	3 75	3 75	3 56
Assistant core makers, per day .....	.....	.....	3 50	.....
Carpenters, per day .....	3 60	3 60	3 00	4 17
Boiler makers, per day .....	4 00	4 00	4 00	4 00
Boiler makers' helpers, per day .....	2 95	2 95	3 00	2 74
Blacksmiths' helpers, per day .....	3 15	3 15	3 25	2 74
Sheet iron workers, per day .....	3 00	3 00	.....	3 25
Laborers, per day .....	2 20	2 20	.....	2 50

AVERAGE WAGES (WITH BOARD) OF FARM HANDS, RANGE RIDERS,  
SHEEP HERDERS AND RANCH COOKS, JUNE 30, 1900, AS REPORTED BY  
EMPLOYERS.

Counties	Farm Hands	Sheep Herders	Range Riders	Cooks, Male	Cooks, Female	Counties	Farm Hands	Sheep Herders	Range Riders	Cooks, Male	Cooks, Female
Beaverhead ..	\$30 00	\$34 45	\$32 50	\$35 00	\$20 50	L. & C .....	\$31 65	\$34 17	\$43 75	\$45 00	\$39 33
Broadwater ..	29 00	35 00	35 00	35 00	.....	Madison ..	32 00	34 00	35 00	40 00	23 35
Cascade .....	29 25	36 00	31 75	39 00	26 30	Meagher ..	32 60	37 00	32 50	33 75	23 60
Choteau .....	33 50	36 35	36 25	36 00	33 10	Park .....	30 50	37 50	40 00	.....	15 00
Custer .....	32 25	35 90	38 08	41 75	19 45	Sweet Grass ..	34 15	37 10	36 00	35 00	18 00
Dawson .....	30 35	31 50	35 00	40 00	17 00	Teton .....	32 69	34 29	36 00	35 00	24 17
Deer Lodge ..	32 50	35 00	40 00	25 00	25 00	Valley .....	33 00	38 60	40 00	36 50	30 00
Fergus .....	33 09	31 70	40 00	38 75	22 31	Yellowstone ..	32 24	35 91	40 00	.....	26 25

## GENERAL AVERAGE FOR THE STATE.

Farm hands .....	\$31 00
Sheep herders .....	35 23
Range riders .....	36 99
Male cooks .....	32 24
Female cooks .....	22 71

## SCALE OF PRICES FOR CIGAR MAKERS.

Clear Havana hand work cigars, five inches long, straight .....	\$23 per thousand
\$1.00 less on each quarter-inch shorter down to four inches or less.	
Seed and Havana hand work, five inches long, straight .....	\$18 per thousand
\$1.00 less on each quarter-inch shorter down to four inches or less.	
Clear seed hand work, five inches long, straight .....	\$16 per thousand
\$1.00 less on each quarter-inch shorter down to four inches or less.	
Clear seed mould work, five inches long, straight .....	\$13 per thousand
\$1.00 less on each quarter-inch shorter down to four inches or less.	
For cuttings, \$1.00 more than above scale of prices.	
Mixed, tipped or sprigged, same as clear Havana filler.	
All cigars not straight, \$1 extra.	
Sharper and less than five molds work, \$1 less than hand work	
On hand scraps (scraps to be prepared), \$1 extra.	
All wages payable weekly in cash.	



AVERAGE WAGES OF EMPLOYEES IN AND AROUND MINES, MILLS AND  
SMELTERS IN PRINCIPAL EMPLOYING COUNTIES, AS TAKEN FROM  
REPORTS MADE BY EMPLOYERS FOR THE YEAR ENDING JUNE 30, 1900  
MINES.

Occupation.	Granite County....	Jefferson County...	Lewis and Clarke County..	Madison County...	Meagher County...	Missoula County...	Park County...	Ravalli County...	Silver Bow County....
Assayers .....								\$3.50	\$4.50
Blacksmiths .....	\$3.83	\$5.00	\$4.25	\$3.38	\$3.75			3.50	4.07
Blacksmiths helpers .....		3.00							3.03
Carmen and shovelers .....		3.00	3.00	3.00	3.00	3.00		2.50	3.50
Carpenters .....		4.00	5.00					3.00	4.50
Clerks and bookkeepers .....	mo 100.00	mo 150.00	mo 125.00						mo 124.37
Compressor men .....									3.50
Engineers .....		3.72	4.50	3.50	4.00			3.59	4.02
Firemen .....		3.00	3.00		3.50				3.50
Foremen .....	mo 177.50	mo 162.85	5.00	4.50	5.50		4.00	4.00	5.98
Laborers .....		3.30	3.00	2.50	2.50		2.50		3.03
Machinists .....		4.00	4.33						4.00
Miners .....	3.50	3.42	3.50	3.00	3.50	3.50	3.50	3.00	3.50
Pumpmen .....			4.00	4.00					4.00
Ropemen .....									3.50
Shift Bosses .....	4.00								4.93
Sta. Tenders .....									3.50
Timbermen .....					4.00			3.50	4.00
Teamsters .....	3.00								3.00

NOTE.—The Montana Ore Purchasing Co. and the mines owned and controlled by Hon. W. A. Clark, voluntarily reduced the hours of work from 10 to 8, for all miners employed in the properties during the summer of 1900.

## MILLS AND SMELTERS.

Occupation.	Cascade County.	Deer Lodge County.	Granite County.	Jefferson County.	Lewis & Clarke County.	Madison County.	Meagher County.	Ravalli County.	Silver Bow County.
Amalgamator .....			\$3.50	\$4.00		\$5.00		\$3.50	\$4.00
Assayer .....	m \$75-185	m \$125-200				mo 60.00			1.50
Blacksmiths .....	4.12	4.00			4.00				4.00-5.00
Blacksmiths' Helpers ..	2.70	3.00-3.50			2.50				3.00-3.50
Bookkeepers and Cl'ks ..	m 75-150	1.25-1.50							
Bricklayers .....	5.00-6.00	6.00-7.00							
Carpenters .....	3.50-4.25	4.50-5.50			4.00	3.50-6.00			4.00-6.00
Carpenters' Helpers .....	2.25-3.15				2.50				
Concentrator Men .....	2.50-3.50	2.75							3.50
Crusher Men .....			3.00					2.50	
Dippers .....	4.40	4.00-6.00							
Dynamo Tenders .....	3.50								
Electrolytic Men .....	2.25-2.50								
Electric Crane Men .....	3.25								
Electricians .....	2.00-4.00				2.50				
Engineers .....	3.00-4.00	4.00	4.00		3.50	3.50-4.50	4.00		4.00
Firemen .....	2.50-4.00	3.25-3.50			4.00				3.50-4.00
Foremen (by day) .....	3.25-5.00	3.50-5.50			4.00	4.00		4.00	4.00-5.00
Foremen (by month) .....	100-1.80	1.00-2.30	75.00		175.00				1.25-2.00
Feeders .....	2.50-3.25	3.00-3.50			3.00-6.00				3.50-4.00
Furnace Men .....	2.50-3.25	3.50			3.00				3.25
Jig Men .....								2.50-3.00	
Laborers .....	2.00-2.75	2.50-2.75	3.00	3.00	2.00	2.50	2.50		3.00-3.50
Lead Burners .....	5.77								
Lead Burners' Helpers ..	2.50								
Machinists .....	3.50-4.50	4.00-4.50			3.50-4.25				4.00-4.50
Machinists' Helpers .....	2.50-3.25	3.50			2.00-2.75				3.00-3.50
Masons .....	5.00	6.00-7.00			mo 130.00				6.00
Masons' Helpers .....	2.25-3.50				2.25				4.50
Mill and Battery Men .....					3.00	2.75-4.00			3.50
Pokers and Graters .....	3.00-3.25								
Pot Pullers .....	2.50	3.00			2.50				3.00
Rope Splicers .....	3.00	3.00							
Roasters .....	2.25-2.50				2.25-2.50				3.50
Samplers .....	2.50-2.75	3.00			2.25-2.50				
Skimmers .....	3.50-4.00	3.50-4.00							4.00-4.50
Skimmers' Helpers .....		3.00							3.00
Tappers .....	2.50-3.25	3.50							4.00
Trammers .....	2.50-3.00				2.50	2.50			3.00
Vauners .....									3.50
Weighers .....	mo 75-110				2.25				3.25
Watchmen .....	2.75	3.50-2.00			2.25				3.00-3.50
Hours work per day .....	8-12	8-10	12	8-10	10-12		8-12½	12	8-12
Av No days' pay with- held pay day .....	10	10	15	none	11	none	20	20	none
Hospital dues per man ..	1.00	1.00-1.50	1.25	1.50	1.50	1.00		1.00	1.00
Board and Lodging, per week .....	5.50-6.25	5.50-6.25	7.00	7.00		5.25-7.00	7.00	5.00	6.00-7.00

WAGES OF COAL MINE EMPLOYEES AS REPORTED BY EMPLOYERS  
JUNE 30, 1900.

Occupation.	Lowest.	Highest.
Superintendents, per month .....	\$150 00	\$183 23
Bookkeepers, per month .....	90 00	175 00
Electricians, per month .....	125 00	125 00
Store managers, per month .....	125 00	125 00
Store clerks, per month .....	75 00	75 00
Weighmen, per month .....	100 00	100 00
Foreman of mine, per day .....	3 25	5 00
Engineers, per day .....	3 15	4 00
Firemen, per day .....	2 25	3 00
Machinists, per day .....	3 50	4 00
Blacksmiths, per day .....	2 25	3 85
Blacksmith's helpers, per day .....	2 50	2 60
Carpenters, per day .....	3 00	3 00
Timbermen, per day .....	2 50	3 60
Tracklayers, per day .....	2 90	3 60
Jigmen, per day .....	3 00	3 00
Underground drivers, per day .....	2 75	3 13
Skilled mine laborers, per day ..	3 50	3 50
Common mine laborers, per day ..	3 00	3 00
Other laborers, per day .....	1 50	3 50
Trappers, per day .....	1 10	1 60
Machine drill helpers, per day .....	2 55	2 55
Miners, per ton .....	45	1 00
Loaders, per ton .....	20	20
Machine runners, per square foot ..	03	05
Drill runners, per hole .....	25	65

## COST OF LIVING.

AVERAGE PRICES AT WHICH MONTANA FARMERS COULD MARKET THEIR PRINCIPAL PRODUCTS IN CERTAIN CITIES AND TOWNS IN THE STATE DURING THE YEAR ENDING JUNE 30, 1900, AS STATED BY OR VERIFIED FROM REPORTS OF PRINCIPAL DEALERS IN PLACES NAMED.

COUNTIES AND TOWNS.	Wheat, average price per bushel..	Rye, average price per bushel....	Barley, average price per bushel..	Oats, average price per bushel .....	Potatoes, average price per 100 lbs..	Peas average price per 100 lbs..	Rutabagas, av'age. price per 100 lbs..	Onions, average price per 100 lbs..	Baled Hay, first quality, per ton..	Baled Hay, second quality, per ton..	Loose Hay, first quality, per ton..	Loose Hay, second quality, per ton..	Eggs, per dozen .....	Ranch Butter, per pound .....	Poultry, average price, per dozen..
BEAVERHEAD CO.															
Bannack .....	\$0.75			\$0.48	\$1.00		\$0.75	\$3.00					\$0.20	\$0.20	\$0.20
Dillon .....							.60						.20	.25	.65
Jackson .....															
Lima .....				.32	.80				12.00	10.00	8.00		.20	.20	
BROADWATER CO.															
Canton .....	.60		.48	.335	.70	2.00	1.00	2.00	9.00	7.00	6.50	5.00	.20		
Radersburg .....	.75			.40	.75		1.00	3.00	11.00	9.00	8.00	6.00	.15		.25
Toston .....	.60	.56	.48	.35	.50	2.00	.50	3.00	12.00	10.00	7.00	5.00	.20		.25
CARBON CO.															
Bridger .....	.49			.32	.80		1.50	2.75	10.00	4.00	10.00	4.00	.20		20
Gebro .....	.54			.30	.85			2.00	9.00	8.00	8.00	7.00	.20		20
Red Lodge .....	.60		.75	.304	.75		1.00	2.00	10.00	8.00	8.00	6.00	.25		25
Roberts .....	.54			.304	.68	3.00	.50	2.00	10.00	8.00	7.00	4.00	.20		20
Rockvale .....	.51			.32	.75			2.00	7.00				.15		20
CASCADE CO.															
Belt .....	.60	.56	.48	.35	.80	3.00	.50	2.00	12.00	10.00	10.00	8.00	.25		25
Cascade .....	.60	.56		.43	1.00	2.50	.75	1.56	14.00	12.00	12.00	10.00	.20		20
Great Falls .....	.75			.40	.55		.55	.75	11.00	9.00	11.00	9.00	.20		15
Havre .....	.75			.40	1.25		1.25	2.00	10.00	8.50	7.50	9.00	.25		25
Nehart .....	.60			.40	1.00	3.00	.50	2.00	12.00		11.00		.25		25
Sand Coulee .....	.75	.65		.40	1.00			1.50	12.00	10.00	10.00	7.50	.20		20
Sunnyside .....				.40				2.00	12.00	10.00	12.00	10.00	.20		20



## COST OF LIVING—Continued.

COUNTIES AND TOWNS.	Wheat, average price per bushel..	Rye, average price per bushel.....	Barley, average price per bushel..	Oats, average price per bushel .....	Potatoes, average price per 100 lbs..	Peas average price per 100 lbs..	Rutabagas, average price per 100 lbs..	Onions, average price per 100 lbs..	Baled Hay, first quality, per ton..	Baled Hay, second quality, per ton..	Loose Hay, first quality, per ton..	Loose Hay, second quality, per ton..	Eggs, per dozen .....	Ranch Butter, per pound .....	Poultry, average price, per dozen..
CHOTEAU CO.															
Chinook .....	.90			.48	1.00			2.00	8.50	7.50	6.50	5.50	.25	.25	....
Dupuyer .....	.75	.65	.60	.50	.60		1.40	2.00	8.00		7.00		.25	.25	4.50
Ft. Benton .....	.75			.46	1.00		.75	2.00	13.00	11.00	10.00	7.00	.20	.20	4.00
CUSTER CO.															
Black Lake .....	1.20	.84	.96	.64	1.50	1.50	1.0	4.00	10.00	8.00	8.00	6.00	.20	.25	3.00
Stacey .....	.75	.65	.60	.40	1.00	1.00	1.0	2.50	8.00	7.00	8.00	7.00	.25	.25	4.00
DEER LODGE CO.															
Deer Lodge .....	.64			.32	.75			2.00	12.00	8.00	10.00	8.00	.25	.25	4.00
Elliston .....	.75			.45	.85	2.50	.75	1.50	13.00	10.00	8.00	5.00	.20	.20	6.00
Ovande .....	.75	.56	.53	.40	1.00		.75	3.50	5.00	3.50			.20	.20	4.00
Pioneer .....	1.05			.48	1.00								.25	.25	....
FERGUS CO.															
Judith .....	.90			.40	1.50						7.00		.20	.30	....
Lavina .....	.60			.40	1.00			3.00	15.00				.20		....
Lewistown .....	.60			.32				2.00	12.00		10.00		.20	.25	....
Stanford .....	.75			.40	1.00		1.5	3.00	12.00	10.00	6.50	6.50	.20	.25	6.00
Ubet .....	.60			.35					14.00	10.00	10.00	6.00	.20	.25	5.00
FLATHEAD CO.															
Kalispell .....	.60		.60	.256	.50		.50	2.00	12.00	9.00	10.00	8.00	.20	.20	3.00
Marston .....	.60			.24	.75			4.00	11.00				.20		....
GALLATIN CO.															
Belgrade .....	.40	.42	.36	.32	.60				10.00	8.00	7.00	5.00	.15	.25	3.00
Bozeman .....	.50	.60	.29	.32	.60		.50		11.00	9.00	9.00	8.00	.15	.20	4.00
Logan .....	.70	.65	.43	.32	.40		1.00	2.00	10.00	8.00	9.00	6.00	.20	.20	4.00
Manhattan .....	.55		.41	.32	.70		1.00	2.00	10.00	8.00	6.00	5.00	.20	.25	3.50

COST OF LIVING—(Continued.)

COUNTIES AND TOWNS.		Poultry, average price, per dozen..	Ranch Butter, per pound .....	Eggs, per dozen ....	Loose Hay, second quality, per ton..	Loose Hay, first quality, per ton..	Baled Hay, second quality, per ton..	Baled Hay, first quality, per ton..	Onions, average price per 100 lbs..	Rutabagas, average price per 100 lbs..	Pears, average price per 100 lbs..	Potatoes, average price per 100 lbs..	Oats, average price per bushel .....	Barley, average price per bushel..	Rye, average price per bushel....	Wheat, average price per bushel..
GRANITE CO.																
Garnet .....		.20	.20	.25	9.00	12.00	14.00	18.00	2.00	.75	2.50	1.25	.56			1.05
Granite .....		.30	.20	.20	10.00	14.00	12.00	16.00	1.75	.90		1.00	.51			.84
JEFFERSON CO.																
Boulder... ..		.25	.25	.25	6.00	8.00	10.00	12.00	2.50			1.00	.40			.75
Whitehall .....		.20	.25	.20	9.00	11.00	9.00	11.00	2.00		2.00	1.00	.37			.60
LEWIS AND CLARKE CO.																
East Helena .....		.25	.25	.25	8.00	12.00	9.00	12.00	1.75		1.50	.75	.40			.60
Helena .....		.18	.20	.18	9.00	11.00	10.00	12.00	1.25	.50	2.00	.65	.384			.63
Marysville .....		.25	.25	.25	9.00	12.50	10.00	13.50		.60		.75	.44			.63
MADISON CO.																
Pony .....												.85	.272			.60
Rochester .....		.20	.25	.20	7.00	8.00	12.00	14.00	2.00	.70			.40			.75
Sheridan .....		.20	.20	.20		12.00	12.00	15.00	2.00	.75			.384			.60
Twin Bridges .....		.20	.25	.20	5.00	6.50	9.00	10.00	4.00	.50	3.00	1.00	.44			.60
MISSOULA CO.																
Bonita .....		.25	.20	.25	8.00	10.00	9.00	10.00	1.75			1.00	.40			.72
Plains .....		.20	.20	.20		7.50	10.00	12.00	1.50			.50	.35			.55
Thompson .....		.25	.20	.25		8.00	10.00	12.00	2.00	.50		.75	.40			.60
PARK CO.																
Jardine .....		.15		.25					3.00			1.25	.448			.75
RAVALLI CO.																
Hamilton .....		.25	.20	.25	7.00	9.00	9.00	11.00	1.00	.75	1.50	.75	.32			.60
Stevensville.. ..		.18	.20	.18	6.00	8.00	9.00	10.00	1.25				.42			.40

## COST OF LIVING—(Continued.)

COUNTIES AND TOWNS.	Wheat, average price per bushel..	Rye, average price per bushel.....	Barley, average price per bushel..	Oats, average price per bushel .....	Potatoes, average price per 100 lbs..	Pears, average price per 100 lbs.	Rutabagas, av'age. price per 100 lbs.	Onions, average price per 100 lbs	Baled Hay, first quality, per ton..	Baled Hay, second quality, per ton..	Loose Hay, first quality, per ton..	Loose Hay, second quality, per ton..	Eggs, per dozen .....	Ranch Butter, per pound .....	Poultry, average price per doz....
SILVER BOW CO.															
Butte .....	.60			.384	.90		.50	1.25	12.00	9.00			.20		
SWEET GRASS CO.															
Melville .....				.40	1.00				8.00		8.00	5.00	.15	.25	
TETON CO.															
Shelby .....	.75	.56	.72	.32	.75	4.00	1.50	3.00	11.00	8.00	10.00	7.00	.20	.25	6.00
VALLEY CO.															
Glasgow .....	1.20			.56	1.00		2.00	3.00	8.00			5.00	.20	.30	6.00
Saco .....	1.20			.56	1.50		2.00	3.00	8.00	6.00	6.00	4.00	.25	.25	3.00
YELLOWSTONE CO.															
Billings .....	.51		.36	.32	.65	3.00	.75	1.50	10.00	8.00	8.00	5.00	.22½	.22½	4.50
Park City .....	.52	.32		.32	.60				9.00	6.00			.20	.20	4.50



COST OF LIVING BY AVERAGE PRICES OF GROCERIES AND MEATS AT WHOLESALE AND RETAIL AS AVERAGED FROM THE REPORTS OF LEADING MERCHANTS, DEALERS AND BUTCHERS IN PRINCIPAL CITIES AND TOWNS OF THE RESPECTIVE COUNTIES DURING YEAR ENDED JUNE 30, 1900.

ARTICLES.	Unit of Quantity.	Beaverhead.				Broadwater.		
		Bannack...	Dillon.....	Jackson....	Lima.....	Canton.....	Radersburg.....	Toston.....
Flour: First quality, imported .....	100 lbs .....	1.10	1.45	2.40	1.45	.....	.....	.....
Flour: First quality, imported .....	per lb. ....	.....	.015	.03%	.02	.....	.....	.....
Flour: First quality, Montana .....	100 lbs .....	2.60	2.60	2.40	.....	1.77	2.00	2.50
Flour: First quality, Montana .....	per lb. ....	.....	.02%	.03%	.....	.02%	.022	.02%
Flour: Second quality, imported .....	100 lbs .....	1.10	.....	1.50	.....	.....	.....	2.25
Flour: Second quality, imported .....	per lb. ....	.....	.....	.025	.....	.....	.....	.025
Flour: Second quality, Montana .....	100 lbs .....	.....	.....	.....	.....	1.40	1.50	1.80
Flour: Second quality, Montana .....	per lb. ....	.....	.....	.....	.....	.016	.016	.018
Corn Meal .....	100 lbs .....	3.00	1.90	2.50	1.85	1.55	.....	2.20
.....	per lb. ....	.....	.02	.....	.02%	.02	.....	.025
Rolled Oats .....	100 lbs .....	2.475	.....	.....	2.85	2.40	.....	2.75
Rolled Oats .....	per lb. ....	.04	.04	.04	.04	.035	.04	.03
Sugar .....	100 lbs .....	6.40	6.40	.....	6.75	6.00	6.60	6.75
Sugar .....	per lb. ....	.08	.07	.075	.08%	.07	.07	.068
Tea .....	Wholesale .....	.....	.48	.....	.37	.35	.....	.50
Tea .....	Retail .....	.50@.75	.50	.75	.50	.45	.50	.50
Coffee .....	Wholesale .....	.....	.135	.....	.14	.11	.....	.125
Coffee .....	Retail .....	.15	.15	.20	.20	.12%	.12%	.125
Lard .....	Wholesale .....	.....	.10	.....	.10%	.09	.....	.12
Lard .....	Retail .....	.12	.11	.12%	.11%	.10	.11	.12
Bacon .....	Wholesale .....	.....	.115	.....	.10%	.11	.....	.11%
Bacon .....	Retail .....	.14	.12	.14	.13	.125	.10	.11%
Ham .....	Wholesale .....	.....	.13	.....	.11%	.115	.....	.125
Ham .....	Retail .....	.14	.135	.14	.15	.13	.13	.125
Butter .....	Wholesale .....	.....	.24	.....	.19	.20	.....	.25
Butter .....	Retail .....	.25	.25	.25	.25	.25	.25	.25
Eggs .....	Per case .....	.....	.17	.....	4.65	4.75	.....	5.00
Eggs .....	Per dozen .....	.25	.18	.25	.20	.20	.15	.20
Potatoes .....	Wholesale 100 lbs .....	.....	.90	.....	.80	.70	.....	1.00
Potatoes .....	Retail 100 lbs .....	1.50	.95	1.50	1.00	1.00	.75	1.00
Canned Vegetables .....	Per case .....	.....	2.25	.....	2.25	.....	.....	2.75
Canned Vegetables .....	Per can .....	.....	.10	.15	2.75	.....	2.75	.10
Canned Fruit .....	Per case .....	.....	3.90	.....	.....	.....	.125	.10
Canned Fruit .....	Per can .....	.15@.25	.20	.20	.....	3.85	3.75	3.75
Boiling Meats .....	Wholesale, lb .....	.....	.....	.....	.....	.20	.20	.20
Boiling Meats .....	Retail, lb .....	.10	.....	.....	.....	.....	.07	.....
Steaks .....	Wholesale, lb .....	.....	.....	.....	.....	.....	.....	.....
Steaks .....	Retail, lb .....	.18	.....	.....	.....	.....	.14	.....

## COST OF LIVING—Continued.

ARTICLES.	Unit of Quantity	Carbon					Cascade		
		Bridger.....	Gebo.....	Rockvale....	Roberts.....	Red Lodge..	Belt.....	Great Falls	Havre .....
Flour: First quality, imported	100 lbs ..	2.50	1.90			2.15	2.50	2.25	
Flour: First quality, imported	per lb ..	.025	.025			.025	.025	.025	
Flour: First quality, Montana	100 lbs ..	2.50	2.00	2.00	1.90	1.90	2.40	2.25	2.00
Flour: First quality, Montana	per lb ..	.025	.025	.025	.02	.021	.027	.025	.021
Flour: Second quality, imported	100 lbs ..		1.60			1.90			
Flour: Second quality, imported	per lb ..		.021			.021			
Flour: Second quality, Montana	100 lbs ..	2.00	1.85	1.75	1.65	1.70	2.00	2.05	1.85
Flour: Second quality, Montana	per lb ..	.02	.021	.021	.015	.02	.024	.025	.021
Corn Meal	100 lbs ..	2.00	1.50	2.00	1.60	1.90	2.25	1.60	2.00
Rolled Oats	per lb ..	.02	.024	.03	.024	.024	.026	.02	.03
Rolled Oats	100 lbs ..	2.15	2.90	3.50	1.60	2.50	4.00	2.00	2.75
Rolled Oats	per lb ..	.026	.05	.05	.024	.024	.05	.05	.036
Sugar	100 lbs ..	6.40	6.25	6.25	6.20	6.15	6.75	6.85	6.25
Sugar	per lb ..	.07	.07	.07	.07	.061	.07	.07	.063
Tea	Wholesale		.40	.35	.40	.38	.50	.37	.35
Tea	Retail		.60	.50	.50	.50	.65	.60	.50
Coffee	Wholesale		.12	.12	.12	.12	.20	.25	.13
Coffee	Retail		.35	.12	.12	.13	.35	.30	.15
Lard	Wholesale	.15	.16	.09	.095	.09	.09	.09	.07
Lard	Retail	.10	.11	.10	.11	.10	.10	.10	.085
Bacon	Wholesale		.10	.085	.11	.105	.08	.105	.11
Bacon	Retail	.11	.14	.10	.115	.125	.10	.13	.125
Ham	Wholesale		.11	.112	.12	.115	.11	.115	.12
Ham	Retail	.125	.16	.14	.135	.13	.13	.13	.14
Butter	Wholesale		.20	.20	.20	.20	.20	.28	.25
Butter	Retail	.25	.25	.25	.25	.25	.25	.25	.30
Eggs	Per case	6.00	6.00	4.50	5.20	5.25	4.50	4.50	4.00
Eggs	Per doz	.25	.20	.15	.20	.25	.25	.25	.25
Potatoes	Wholesale, 100 lbs		.75	.75	.70	1.00	.75	1.00	.55
Potatoes	Retail 10 0lbs	1.00	1.50	1.00	1.00	1.00	1.00	1.50	.55
Canned Vegetables	Per case	2.40	2.00	2.75	2.10	2.25	2.25	2.25	2.00
Canned Vegetables	Per can	.125	.125	.125	.125	.10	.125	.125	.10
Canned Fruit	Per case	3.75	3.00	4.50	3.60	3.60	4.00	4.00	4.00
Canned Fruit	Per can	.20	.20	.20	.20	.15	.20	.20	.20
Boiling Meats	Wholesale lb					.08		.08	
Boiling Meats	Retail lb	.12				.10		.10	
Steaks	Wholesale lb					.12		.12	
Steaks	Retail lb	.16				.15		.15	

## COST OF LIVING—Continued.

ARTICLES.	Unit of Quantity.	Cascade.				Choteau.		Custer.	
		Neihart .....	Sand Coulee.	Sunnyside...	Chinook.....	Ft. Benton..	Ekalaka.....	Stacey.....	
Flour: First quality, imported .....	100 lbs .....	2.85	.....	2.20	2.25	2.40	3.00	2.60	
Flour: First quality, imported .....	per lb .....		.....	.025	.025	.025	.03%	.....	
Flour: First quality, Montana .....	100 lbs .....	2.75	2.25	2.20	2.25	2.25	.....	2.50	
Flour: First quality, Montana .....	per lb .....		.02%	.025	.025	.025	.....	.....	
Flour: Second quality, imported .....	100 lbs .....	.....	.....	2.00	2.00	.....	2.76	.....	
Flour: Second quality, imported .....	per lb .....		.....	.02%	.02	.....	.03	.....	
Flour: Second quality, Montana .....	100 lbs .....	2.40	1.90	2.00	2.00	.....	.....	.....	
Flour: Second quality, Montana .....	per lb .....		.024	.02%	.02	.....	.....	.....	
Flour: Second quality, Montana .....	100 lbs .....	2.00	1.50	1.50	2.00	1.65	2.50	2.75	
Corn Meal .....	per lb .....		.024	.02	.025	.02	.02%	.03	
Corn Meal .....	100 lbs .....	2.90	3.00	2.20	3.50	2.60	4.76	3.50	
Rolled Oats .....	per lb .....		.04	.02%	.04	.045	.05	.05	
Rolled Oats .....	100 lbs .....	6.50	6.40	6.25	6.75	6.25	7.50	7.50	
Sugar .....	per lb .....		.08	.065	.08	.07	.08	.08	
Sugar .....	Wholesale .....		.38	.40	.40	.45	.45	.50	
Tea .....	Retail .....	.50	.115	.13	.135	.115	.14	.18	
Tea .....	Wholesale .....		.15	.15	.15	.125	.15	.20	
Coffee .....	Retail .....	.125	.08	.10	.10	.09	.11	.10	
Coffee .....	Wholesale .....		.10	.11	.11	.10	.12	.11	
Lard .....	Retail .....	.10	.09	.11	.125	.105	.12	.12	
Lard .....	Wholesale .....		.125	.14	.13	.12	.13	.13	
Bacon .....	Retail .....	.125	.11	.11	.12	.12	.13	.14	
Bacon .....	Wholesale .....		.11	.14	.15	.14	.14	.15	
Ham .....	Retail .....	.125	.14	.20	.25	.26	.25	.22	
Ham .....	Wholesale .....		.25	.25	.25	.30	.30	.25	
Butter .....	Retail .....	.25	5.50	4.30	7.50	7.20	2.40	.....	
Butter .....	Per case .....	5.25	.25	.25	.25	.20	.25	.25	
Eggs .....	Per doz .....	.....	.....	.....	.....	.....	.....	.....	
Eggs .....	Wholesale 100 lbs .....		1.00	1.00	1.00	1.00	1.25	1.00	
Potatoes .....	Retail 100 lbs .....	1.25	1.25	1.25	1.25	1.25	1.25	1.00	
Potatoes .....	Per case .....	2.75	2.20	2.25	2.75	2.60	3.50	3.00	
Canned Vegetables .....	Per can .....	.....	.15	.15	.15	.15	.15	.15	
Canned Vegetables .....	Per case .....	4.25	3.50	.....	5.50	4.25	4.80	5.00	
Canned Fruit .....	Per can .....	.....	.20	.....	.25	.20	.25	.25	
Canned Fruit .....	Wholesale lb .....	.....	.....	.....	.....	.....	.09	.07	
Boiling Meats .....	Retail lb .....	.....	.10	.....	.....	.....	.10	.....	
Boiling Meats .....	Wholesale lb .....	.....	.....	.08	.02	.....	.....	.....	
Steaks.....	Retail lb .....	.....	.15	.12	.18	.....	.15	.....	



## COST OF LIVING—Continued.

ARTICLES.	Unit of Quantity	Deer Lodge					Fergus			
		Deer Lodge.	Elliston.....	Ovando.....	Pioneer.....	Judith.....	Lavina.....	Lewistown..	Stanford....	Ubet.....
Flour: First quality, imported	per lbs	2.40	2.75		3.60	3.00	2.65	2.75		
Flour: First quality, imported	per lb	.02%	.03			.085		.03		
Flour: First quality, Montana	per lbs	2.25	2.40		2.65		2.50	2.50	3.00	2.65
Flour: First quality, Montana	per lb	.025	.02%					.02%		
Flour: Second quality, imported	per lbs		2.10	.03					2.85	
Flour: Second quality, imported	per lb		.024							
Flour: Second quality, Montana	per lbs	1.85	1.90	1.95	2.50		2.25		2.70	2.40
Flour: Second quality, Montana	per lb	.02	.02%	.024						
Corn Meal	per lbs	1.40	1.60	2.20	2.00	2.75	2.25	3.00	2.50	
Corn Meal	per lb	.02	.03	.026		.03		.04		.04
Rolled Oats	per lbs	2.00	4.70	3.00		3.50	3.75	3.25	4.00	
Rolled Oats	per lb	.025	.05	.10	.04	.04		.045		.05
Sugar	per lbs	6.75	6.25	7.00	7.50	7.50	6.60	7.00	7.00	.075
Sugar	per lb	.07	.066	.073	.08	.08		.50		
Tea	Wholesale	.40	.36	.43		.40				
Tea	Retail	.50	.50	.60	.50	.50	.50	.60	.60	.60
Coffee	Wholesale	.13	.11%			.15		.13		
Coffee	Retail	.15	.15	.15	.15	.16	.15	.16	.20	.17
Lard	Wholesale	.09	.09%	.09		.10		.11		
Lard	Retail	.11	.11	.11	.10	.12	.10	.12	.10	.125
Bacon	Wholesale	.10	.10%	.105		.13		.125		.125
Bacon	Retail	.12	.125	.13	.13	.14	.115	.135	.12	.135
Ham	Wholesale	.12	.115	.11		.14		.13		.135
Ham	Retail	.14	.13	.15	.14	.15	.125	.145	.13	.145
Butter	Wholesale	.20	.20	.20	.25	.30		.25		
Butter	Retail	.25	.20	.25	.25	.33%	.25	.25	.25	.25
Eggs	per case	4.00	7.50	5.50			6.00			6.00
Eggs	per doz	.25	.25	.20					.20	.20
Potatoes	Whol. 100 lbs.	.75	.75	1.00		1.00	1.00	1.00	1.00	1.00
Potatoes	Ret. 100 lbs	1.00	1.00	1.00		1.50	1.00	1.00	1.00	1.25
Canned Vegetables	per case	2.75	2.40	3.00		3.00	2.90	3.25	3.25	4.00
Canned Vegetables	per can	.15	.125	.15	.125	.15		.20		.20
Canned Fruit	per case	3.25	4.75			3.50	5.00	5.00	4.00	
Canned Fruit	per can	.20	.25	.25	.25	.20		.25		.25
Boiling Meats	Whol. lbs		.06	.07						
Boiling Meats	Ret. lbs		.10	.07					.10	.10
Steaks	Whol. lbs		.10	.08						
Steaks	Ret. lbs		.15	.09					.18	.125

COST OF LIVING—Continued.

ARTICLES.	Unit in Quantity	Flathead			Gallatin			Granite			Jefferson	
		Kalispell.....	Marston.....	Belgrade....	Bozeman....	Logan.....	Drummond..	Garnet.....	Granite.....	Boulder.....	Whitehall....	
Flour: First quality, imported	60 lbs	2.40								2.40		.02%
Flour: First quality, imported	Per lb											
Flour: First quality, Montana	100 lbs...	2.20	2.75	2.20	2.30	2.30	.02%	3.50	2.15	2.10		
Flour: First quality, Montana	Per lb...	2.20			.024	2.00	.027	3.75	.025	2.00		.025
Flour: Second quality, imported	100 lbs					.02%		.03%				
Flour: Second quality, imported	Per lb	1.80	2.50	1.80	1.40	1.50	1.60	2.50	1.60	1.85		.02
Flour: Second quality, Montana	100 lbs					.01%	.02	.025	.02			
Flour: Second quality, Montana	Per lb	2.25	4.50	2.00	1.40	1.50	1.65	2.75	2.00	2.75		.03
Corn Meal	100 lbs	.025			.018		.02%	.03	.03			
Corn Meal	Per lb	3.00	4.50	3.75	2.50	2.70	3.00	4.50	3.30	3.00		.03
Rolled Oats	100 lbs	.035			.04		.04	.06	.04	.03		
Rolled Oats	Per lb	6.75		6.25	6.50	6.10	6.00	7.25	6.25	6.50		.065
Sugar	Per lb	.07%	.08			.06%	.065	.08	.07	.065		
Tea	Wholesale	.35				.38	.40	.48	.42			
Coffee	Retail	.50	.60	.60	.60	.60	.50	.65	.60	.50		.50
Coffee	Wholesale	15			.14	.12%	.12	.125	.16			
Lard	Retail	.20	.175	.30	.14%	.13%	.13	.15	.20	.15		.15
Lard	Wholesale	.10			.09%	.08%	.085	.105	.09			
Bacon	Retail	.12	.13	.10	.11	.10%	.10%	.125	.09%	.10		.10
Bacon	Wholesale	.125	.14	.12	.105	.125	.125	.135	.115	.13		.125
Ham	Retail	.11%			.10%	.115	.135	.135	.10%			
Ham	Wholesale	.14	.16	.14	.13	.14	.14	.145	.125	.135		.125
Butter	Retail	.125			.13							
Butter	Wholesale	.15	.25	.25	.20	.25	.28	.25	.25	.25		.25
Eggs	Retail	4.50			4.50	7.00	4.50	6.50	6.00	6.00		
Eggs	Per case	20										
Potatoes	Per doz.	.50	.20	.15	.15	.20	.20	.25	.25	.25		.20
Potatoes	Whol 100 lbs.	.50	.75	.75	.70	.70	.75	1.75	.90	1.00		
Canned Vegetables	Ret. 100 lbs.	2.50	2.50	2.50	2.40	2.35	1.95	2.00	1.25	1.00		1.00
Canned Vegetables	Per case	.15	.15		.125	.125	.10	3.00	2.50	2.25		.10
Canned Fruit	Per can	3.75	4.00	4.00	4.20	3.75	3.40	4.50	4.00	4.50		
Canned Fruit	Per case	.25	.20		.20	.20	.20	.20	.20	.25		.20
Boiling Meats	Per can	.075				.08		.10	.10			.08
Boiling Meats	Whol lb	.10	.08	.08	.09	.10		.10	.10			.08
Steaks.....	Ret. lb	.125			.125	.15		.15	.15			.125

## COST OF LIVING—Continued.

ARTICLES.	Unit in Quantity	Lewis and Clarke			Madison			Missoula		
		East Helena	Helena	Marysville..	Pony.....	Rochester...	Sheridan.....	Twin Bridges	Bonita.....	Thompson...
Flour: First quality, imported	100 lbs	2.10	2.10	3.50				2.50	2.65	1.90
Flour: First quality, imported	per lb	.024	.023					.03	.032	.021/4
Flour: First quality, Montana	100 lbs	1.90	1.95	2.75	2.40	2.10	.023/4	2.10	2.60	1.90
Flour: First quality, Montana	per lb	.021	.020/4			.022	.023/4	.025	.031	.021/4
Flour: Second quality, imported	100 lbs	1.80	1.80	3.00			1.75			1.15
Flour: Second quality, imported	per lb	.013/4	.02				2.00			.015
Flour: Second quality, Montana	100 lbs	1.40	1.40	2.00	2.00	1.75	1.75	1.65	2.10	1.15
Flour: Second quality, Montana	per lb	.017	.016			.021/4	1.75	.02		.017
Corn Meal	100 lbs	1.40	1.50	2.25	2.40	1.60	3.00	1.75		1.70
Corn Meal	per lb	.02	.018		.03	.025	.025	.024	.021/4	.025
Rolled Oats	100 lbs	2.00	2.50	3.25	3.00	3.00	2.75	3.00		3.00
Rolled Oats	per lb	.021/4	.03		.005	.045	.05	.05		.035
Sugar	100 lbs	6.25	6.25	6.75	6.75	6.25	6.55	6.00	6.65	6.35
Sugar	per lb	.065	.065		.07	.08	.075	.065	.072	.069
Tea	Wholesale	.30	.60		.40	.38	.35	.45	.40	.25
Tea	Retail	.50	.75	.60	.50	.50	.60	.60	.60	.40
Coffee	Wholesale	.113/4	.125		.151/2	1.25	.14	.111/4	.135	.11
Coffee	Retail	.15	.14	.15	.161/2	.161/2	.15	.131/4	.15	.135
Lard	Wholesale	.09	.09		.11	.10	.10	.073/4	.10	.09
Lard	Retail	.10	.10	.10	.125	.12	.12	.10	.12	.11
Bacon	Wholesale	.10	.10		.12	.115	.095	.10	.101/4	.12
Bacon	Retail	.11	.11	.125	.125	.14	.12	.13	.13	.14
Ham	Wholesale	.12	.11		.125	.12	.106	.11	.12	.12
Ham	Retail	.12	.12	.14	.13	.14	.14	.14	.14	.15
Butter	Wholesale	.25	.25			.20	.25	.20	.25	.20
Butter	Retail	.275	.275	.30	.25	.25	.30	.25	.30	.25
Eggs	Per case	4.40	4.50	6.00	6.15	6.00	5.00	5.40	4.75	5.50
Eggs	Per doz	.20	.20	.25	.25	.25	.25	.25	.25	.25
Potatoes	Whol. 100 lbs.	.80	.60	1.00	1.75	.75	.75	1.00	1.00	.75
Potatoes	Retail 100 lbs	.80	1.00		2.00	1.00	1.00	1.25	1.25	.50
Canned Vegetables	Per case	2.10	2.50	3.00	2.50	2.75	3.00	2.25	2.50	2.25
Canned Vegetables	Per can	.10	.125	.125	.125	.15	.15	.125	.15	.10
Canned Fruit	Per case	3.25	4.50	4.75	4.25	3.75	3.50	3.00	4.00	4.80
Canned Fruit	Per can	.20	.20	.20	.20	.25	.20	.25	.25	.20
Boiling Meats	Whol. lb	.07					.08	.061/4	.07	.05
Boiling Meats	Ret. lb	.08					.15	.10	.10	.07
Steaks.....	Whol. lb	.10					.10	.09		.08
Steaks.....	Ret. lb	.15					.15	.15	.15	.15



## COST OF LIVING—Continued.

ARTICLES.	Unit in Quantity	Park	Ravalli				St. Bow	S. Grass	Teton		
		Jardine.....	Corvallis....	Grantsdale..	Hamilton....	Stevensville.	Butte.....	Melville.....	Dupuyer.....	Lowry.....	Shelby....
Flour: First quality, imported	100 lbs	.....	3.10	2.50	2.75	.....	2.70	2.45	2.75	.....	1.60
Flour: First quality, imported	per lb	.....	.035	.03	.035	.....	.035	.02%	.....	.....	.018
Flour: First quality, Montana	100 lbs	2.15	2.15	1.50	2.10	2.30	2.10	2.10	2.50	1.95	1.80
Flour: First quality, Montana	per lb	.02%	.02%	.02	.02%	.02%	.025	.025	.....	.....	.02
Flour: Second quality, imported	100 lbs	2.10	1.60	.....	.....	.....	2.30	1.75	2.50	.....	1.40
Flour: Second quality, imported	per lb	.02	.02	.....	.....	.....	.02%	.021	.....	.....	.016
Flour: Second quality, Montana	100 lbs	.....	1.40	.....	1.50	2.25	1.50	.....	2.35	.....	1.60
Flour: Second quality, Montana	per lb	.....	.01%	.....	.02	.025	.....	.....	.....	.....	.018
Corn Meal	100 lbs	2.50	1.80	1.75	2.25	2.00	1.45	2.00	2.50	1.60	2.40
Corn Meal	per lb	.03	.026	.025	.03	.025	.02%	.025	.....	.024	.03
Roll'd Oats	100 lbs	4.50	2.10	2.50	2.75	3.00	2.40	3.25	3.50	2.50	2.75
Roll'd Oats	per lb	.05	.035	.034	.035	.035	.04	.04	.....	.03	.034
Sugar	100 lbs	6.75	6.50	6.25	6.15	6.50	6.35	6.40	7.25	6.40	6.00
Sugar	per lb	.07	.06%	.06%	.069	.08	.07	.07	.....	.06%	.064
Tea	Wholesale	.55	.40	.43	.35	.45	.33	.35	.....	.38	5.00
Tea	Retail	.65	.50	.50	.50	.65	.50	.50	.40	.50	.075
Coffee	Wholesale	.30	.14	.13	.20	.125	.33	.13%	.....	.13%	.13
Coffee	Retail	.30	.26	.15	.25	.15	.154	.15	.16%	.15	.15
Lard	Wholesale	.09%	.09	.08	.085	.10	.09	.10	.....	.095	.085
Lard	Retail	.10	.10	.11	.10	.125	.11	.11	.105	.11	.10
Bacon	Wholesale	.13	.10	.09	.11	.09	.11	.115	.....	.10	9.50
Bacon	Retail	.14	.125	.12	.14	.10	.125	.125	10	.12	.11
Ham	Wholesale	.13	.11	.11	.12	.14	.125	.13	.....	.105	.114
Ham	Retail	.14	.14	.14	.14	.15	.14	.14	14	.125	.114
Butter	Wholesale	.....	.20	.20	.20	.20	.19	.20	.....	.25	.25
Butter	Retail	.30	.25	.20	.20	.25	.25	.25	.25	.30	.27
Eggs	Per case	5.50	.....	.....	.25	5.50	4.00	.....	6.00	.....	4.50
Eggs	Per doz	.25	.25	.20	.25	.20	.20	.20	.....	.25	.20
Potatoes	Whol. 100 lbs.	1.50	.45	.50	.75	.50	1.00	1.00	1.00	1.00	.65
Potatoes	Ret. 100 lbs	.....	.60	.60	1.00	.60	.01%	1.25	.....	1.25	1.00
Canned Vegetables	Per case	3.00	2.25	2.00	2.40	2.40	2.40	2.50	2.50	2.50	2.50
Canned Vegetables	Per can	1.25	.15	.10	1.25	.125	.125	.15	.....	.15	.125
Canned Fruit	Per case	4.50	3.90	3.25	3.00	4.25	4.00	3.50	4.50	3.00	4.50
Canned Fruit	Per can	.....	.20	.25	.20	.20	.20	.25	.....	.20	.25
Boiling Meats	Whol. lb	.....	.08	.08	.07	.07	.10	.....	.....	.07	.03
Boiling Meats	Retail lb	.....	.10	.10	.08	.12	.10	.....	.....	.10	.10
Steaks	Whol. lb	.....	.12	.15	.....	.16	.16	.....	.....	.10	.10
Steaks	Retail lb	.....	.16	.16	.....	.125	.20	.....	.12	.125	.15

## COST OF LIVING—Continued.

ARTICLES.	Unit in Quantity	Valley				Yellowstone		
		Culbertson..	Glasgow.....	Nashua.....	Saco.....	Billings.....	Columbus...	Park City....
Flour: First quality, imported	100 lbs	1.85	2.50	2.25	.....	2.10	.....	2.00
Flour: First quality, imported	per lb	.021	.....	.025	.....	.023	.....	.....
Flour: First quality, Montana	100 lbs	.....	2.50	2.00	2.50	2.00	1.90	1.90
Flour: First quality, Montana	per lb	.....	.....	.025	.....	.023	.02 1/4	.02 1/4
Flour: Second quality, imported	100 lbs	.....	.....	1.75	2.00	.....	.....	.....
Flour: Second quality, imported	per lb	.....	.....	.02	.....	.....	.....	.....
Flour: Second quality, Montana	100 lbs	.....	.....	.....	.....	.....	1.45	1.80
Flour: Second quality, Montana	per lb	.....	.....	.....	.....	.....	.01 1/4	.022
Flour: Second quality, Montana	100 lbs	2.10	3.00	1.00	4.00	.....	1.60	1.35
Corn Meal	per lb	.025	.03	.015	.....	.....	.02 1/4	.02
Corn Meal	100 lbs	3.20	4.00	3.00	4.00	.....	2.65	2.38
Rolled Oats	per lb	.045	.05	.05	.....	.....	.035	.04
Rolled Oats	100 lbs	6.50	7.00	5.50	7.00	.....	6.00	6.38
Sugar	per lb	.06 3/4	.07 1/4	.07	.....	.....	.06 1/4	.065
Sugar	Wholesale	.40	.....	.40	.....	.....	.35	.37
Tea	Retail	.50	.50	.60	.50	.....	.50	.50
Coffee	Wholesale	.13	.13	.13	.....	.....	.11	.11 1/4
Coffee	Retail	.15	.25	.17	.20	.....	.125	.12 1/2
Lard	Wholesale	.085	.....	.09	.....	.09	.08	.085
Lard	Retail	.11	.10	.125	.12	.10	.10	.10
Bacon	Wholesale	.11	.08	.08	.....	.09 1/2	.09	.10 1/8
Bacon	Retail	.13	.125	.10	.12	.12	.11	.12
Ham	Wholesale	.12	.10	.10	.....	.115	.095	.11 1/8
Ham	Retail	.15	.125	.15	.14	.13	.125	.14
Butter	Wholesale	.22	.30	.20	.25	.225	.20	.20
Butter	Retail	.28	.30	.25	.25	.25	.20	.25
Eggs	Per case	4.00	4.50	.....	.....	.....	6.00	6.00
Eggs	Per can	.15	.15	.20	.25	.25	.20	.20
Potatoes	Wholesale 100 lbs	1.25	1.25	1.00	1.50	.85	.60	.60
Potatoes	Retail 100 lbs	1.50	1.50	1.50	.....	.85	.75	.60
Canned Vegetables	Per case	2.40	2.25	2.25	.....	.....	2.10	2.15
Canned Vegetables	Per can	.15	.15	.03	.15	.....	.125	.125
Canned Fruit	Per case	4.80	.....	2.25	.....	.....	3.85	.....
Canned Fruit	Per can	.25	.25	.20	.25	.....	.20	.....
Boiling Meats	Wholesale lb	.....	.....	.08	.....	.....	.....	.....
Boiling Meats	Retail lb	.....	.....	.10	.08	.....	.....	.....
Steaks	Wholesale lb	.....	.....	.10	.....	.....	.....	.....
Steaks	Retail lb	.....	.....	.15	.10	.....	.....	.....

STATEMENT SHOWING PROPORTIONATE SALES, EXPRESSED IN PERCENTAGES, OF CERTAIN "MONTANA" AND "IMPORTED" PRODUCTS, THE INCREASED OR DECREASED SALE OF MONTANA FARM PRODUCTS, AND STATES FROM WHENCE PRODUCTS ARE IMPORTED, AS REPORTED BY OR AVERAGED FROM PRODUCTS OF PRINCIPAL DEALERS IN PLACES NAMED, FOR YEAR ENDING JUNE 30, 1900.

(A number of those reporting Market Prices, as reported in another table, did not fill in statement of relative sales, hence those places are necessarily omitted in these tables. It is believed, however, to show closely the proportionate amounts sold throughout the State.)

The "Dealers" from whom these Reports were received do not include Butchers and Meat Markets. It is probable these would have shown a larger percentage of Montana cured meats sold if reports had been obtained from them.

COUNTY AND TOWN.	FLOUR.					PORK, BACON, HAM.				
	Per Cent of Montana sold .....	Per Cent of Imported sold .....	Per ct increased sale Montana product .....	Per ct decreased sale Montana product .....	From what states "Imported" product principally obtained.	Per Cent of Montana sold .....	Per cent of Imported sold .....	Per ct increased sale Montana product .....	Per ct decreased sale Montana product .....	From what states "Imported" product principally obtained.
<b>BEAVERHEAD CO.</b>										
Bannack .....	5	75			Idaho .....		100			Mo.; Neb .....
Dillon .....		95			Idaho .....		100			Neb .....
Jackson .....		100			Idaho .....		100			Neb .....
<b>BROADWATER CO.</b>										
Canton .....	100						100			Neb .....
Radersburg .....	100						100			Neb .....
<b>CARBON CO.</b>										
Bridger .....	90	10			Dakota .....		100			Neb .....
Gebo .....	98	2			Dakota .....	1	99			Neb .....
Red Lodge .....	75	25			Dakota .....		100			Neb .....
Roberts .....	100						100			Neb .....
Rockvale .....	100						100			Neb .....
<b>CASCADE CO.</b>										
Belt .....	100		10				100			Ia.; Mo .....
Great Falls .....	100						100			Neb .....
Sand Coulee .....	100						100			Neb .....
<b>CHOTEAU CO.</b>										
Chinook .....	90	10			N. D. ....		100			Neb .....
Ft. Benton .....	75	25			Minn .....		100			Neb .....
<b>CUSTER CO.</b>										
Ekalaka .....		100			N. D. ....		100			Ia .....
Stacey .....	10	90			N. D. ....		100			Minn .....
<b>DEER LODGE CO.</b>										
Deer Lodge .....	75	25			Nebr .....		100			Neb .....
Elliston .....	75	25			Dak .....	5	95	95		Ill.; Neb .....
Ovando .....	100					10	90	90		Kan .....
Pioneer .....	25	75			N. D. ....		100	100		Mo .....
<b>FERGUS CO.</b>										
Judith .....		100			Dak .....		100	80		Ill .....
Lavina .....	90						100			
Lewistown .....	85	15					100			
Stanford .....	90						100			
<b>FLATHEAD CO.</b>										
Kalispell .....	100					10	90			Neb .....
Marston .....	100						100		25	Ia.; Kan .....



## STATEMENT SHOWING PROPORTIONATE SALES—Continued.

COUNTY AND TOWN.	FLOUR.					PORK, BACON, HAM.				
	Per Cent of Montana sold .....	Per cent of Imported sold.....	Per ct increased sale Montana product	Per ct decreased sale Montana product	From what states "Imported" product principally obtained.	Per cent of Montana sold.....	Per cent of Imported sold.....	Per ct increased sale Montana product...	Per ct decreased sale Montana product	From what states "Imported" product principally obtained.
<b>GALLATIN CO.</b>										
Belgrade .....	100					50				Mo.
Bozeman .....	100					5	50			Ill.
Logan .....	100						100			Neb.
Manhattan .....	100						100			Neb.
<b>GRANITE CO.</b>										
Drummond .....	100						100			Neb.
Garnet .....	80	20	10				100			Neb.; Ia.; M
Granite .....	100						100			Neb.
<b>JEFFERSON CO.</b>										
Boulder .....	50	50			Minn.; Ill.		100			Dak.
Whitehall .....	95	5			Minn.; Ill.		100			
<b>LEWIS &amp; CLARKE CO.</b>										
East Helena .....	90	10					100			
Helena .....										
Marysville .....	85	15	40		Minn. Mo. Neb. Ill.					
<b>MADISON CO.</b>										
Rochester .....	100						100			Neb.
Sheridan .....	75	25			Dak.	25	75			Mo.
Twin Bridges .....	90	10				5	95			
<b>MISSOULA CO.</b>										
Bonita .....	75	25			Dak.		100			Ill.; Neb.
Plains .....	50	50			Idaho		100			Wash.
Thompson Falls .....	5	95			Wash.		100			Neb.
<b>PARK CO.</b>										
Jardine .....	100						100	20		Neb.; Ill.
<b>RAVALLI CO.</b>										
Corvallis .....	75	25	10		Minn.	20	80		15	Mo.; Ill.
Grantsdale .....	100		50				90			Mo.; Kan.; N
Hamilton .....	80	20			Minn.	25	75			Neb.
Stevensville .....	100					10	90			Neb.
<b>SILVER BOW CO.</b>										
Butte .....	55	45			Min. N D. Neb	95	05			Kan.; Neb.
<b>SWEET GRASS CO.</b>										
Melville .....	50	50			N. D.		100			Neb.
<b>TETON CO.</b>										
Shelby .....	100						100			Minn.
<b>VALLEY CO.</b>										
Culbertson .....	10	90			N. D.		100			Minn.
Glasgow .....	100						100			Minn.
Nashua .....	100						100			
Saco .....	100						100			Minn.
<b>YELLOWSTONE CO.</b>										
Billings .....	90	10			N. D.		100			Neb.
Columbus .....	100						100			
Park City .....	100						100			

## STATEMENT SHOWING PROPORTIONATE SALES—Continued.

COUNTY AND TOWN.	LARD.					BUTTER.				
	Per cent of Montana sold.....	Per Cent of Imported sold.....	Per cent increased sale Montana product	Per ct decreased sale Montana product.	From what states "Imported" product principally obtained.	Per cent of Montana sold.....	Per cent of Imported sold.....	Per ct increased sale Montana product...	Per ct decreased sale Montana product	From what states "Imported" product principally obtained.
<b>BEAVERHEAD CO.</b>										
Bannack .....		100			Mo.; Neb .....		50			Utah; Idaho...
Dillon.. ..		100			Neb .....		10	90		Idaho .....
Jackson .....										
<b>BROADWATER CO.</b>										
Canton .....	20	80				100				
Radersburg .....	50	50			Neb.....	25				
<b>CARBON CO.</b>										
Bridger .....	100				Neb.....	25	75			Neb.....
Gebo .....	1	99			Neb .....	95	5			Wyo.; Nebr..
Red Lodge .....		100			Neb .....	23	75			
Roberts .....		100			Neb.....	100				
Rockvale .....		100			Neb.....	100				
<b>CASCADE CO.</b>										
Belt .....	05	95			Ta.; Mo.....		25	25		Minn.....
Great Falls .....		100				25	75			
Sand Coulee .....	35	65			Neb .....	70	30			Minn.; Dak..
<b>CHOTEAU CO.</b>										
Chinook .....		100			Neb.....	50	50			Minn.....
Ft. Benton .....		100			Neb .....		100			Minn .....
<b>CUSTER CO.</b>										
Ekalaka .....		100			Ta .....	90	10			Minn.....
Stacey .....		100			Minn .....	90	10			
<b>DEER LODGE CO.</b>										
Deer Lodge .....		100			Neb .....	90	10			Minn.....
Elliston .....	5	95			Ill.; Neb .....	90	10			Mont .....
Ovando .....	10	90			Kan.....	80				
Pioneer .....		100			Mo.....		100			S. D.
<b>FERGUS CO.</b>										
Judith.....		100			Ill .....		100			Minn .....
Lavina .....		100					100			
Lewistown .....		100				85	15			
Stanford .....						60	40			Minn.....
<b>FLATHEAD CO.</b>										
Kalispell .....	10	90	10		Neb .....	75	25	20		
Marston .....	50	50			Ta.; Kan .....	75	25			Wash .....
<b>GALLATIN CO.</b>										
Belgrade .....	50	50			Ill.....	100				
Bozeman .....	15				Mo.....	90				Utah.....
Logan .....		100			Neb .....	100				
Manhattan .....	5	95			Neb .....	100				
<b>GRANITE CO.</b>										
Drummond .....		100			Neb .....	100				
Garnet .....	98	2			Neb .....	85	15			Neb. Mo. Min
Granite .....		100			Neb .....	5	95			N. D.
<b>JEFFERSON CO.</b>										
Boulder .....	100					50	50			
Whitehall .....		100				95	5			Minn.....
		100				50	50			
<b>LEWIS &amp; CLARKE CO.</b>										
East Helena .....										(Minn; N. D.
Helena .....						5	95			Wis.; Ill.;
Marysville .....	75	25	50			10	90			Minn.; Dak..

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## STATEMENT SHOWING PROPORTIONATE SALES—Continued.

COUNTY AND TOWN.	LARD.					BUTTER.				
	Per Cent of Montana sold .....	Per Cent of Import- ed sold .....	Per ct increased sale Montana product	Per ct decreased sale Montana product	From what states "Imported" product prin- cipally ob- tained.	Per Cent of Montana sold .....	Per Cent of Import- ed sold .....	Per ct increased sale Montana product	Per ct decreased sale Montana product.	From what states "Imported" product prin- cipally ob- tained.
MADISON CO.										
Rochester .....		100			Neb .....	50	50			Kan.....
Sheridan .....	25	75			Mo .....	85	15			
Twin Bridges .....	10	90				40	60			
MISSOULA CO.										
Bonita .....	10	90			Ill.; Neb.....	5	95			Minn.....
Plains .....		100			Wash .....	100				
Thompson Falls .....		100			Neb .....	5	95			N. D.....
PARK CO.										
Jardine .....		100			Neb.; Ill. ....	10	90			Minn.....
RAVALLI CO.										
Corvallis .....	10	90		5		100		10		
Grantsdale .....		100				100				
Hamilton .....	25	75			Neb .....	100				
Stevensville .....	10	90			Neb .....	100				
SILVER BOW CO.										
Butte .....	05	95				20	80			Ill.; Ia.; Neb (Minn.
SWEET GRASS CO.										
Melville .....		100			Neb .....	75	25	10		Ill.....
TETON CO.										
Shelby .....		100			Minn .....	5	95			Minn.....
VALLEY CO.										
Culbertson .....		100			Minn .....	10	90			Minn.....
Glasgow .....		100				100				
Nashua .....		100				75	25			
Saco .....		100			Minn .....	50	50			Minn.....
YELLOWSTONE CO.										
Billings .....		100			Neb.....	40	60			Minn.....
Columbus .....		100				90	10			Minn.....
Park City.....		100				100				



## STATEMENT SHOWING PROPORTIONATE SALES—Continued.

COUNTY AND TOWN.	CHEESE.				POULTRY.			
	Per Cent of Montana sold .....	Per Cent of Imported .....	Per cent increased sale Montana product...	Per cent decreased sale Montana product.	From what states "Imported" product principally obtained.	Per Cent of Montana sold .....	Per Cent of Imported .....	Per cent increased sale Montana product...
BEAVERHEAD CO.								
Bannack .....	100			Wis	100			
Dillon .....								
Jackson .....	100			N. Y.				
BROADWATER CO.								
Canton .....	100			N. Y.				
Radersburg .....					100			
CARBON CO.								
Bridger .....	100			N. Y.; Wis.				
Gebo .....	100			Minn	75	25		
Red Lodge .....	100			Minn				
Roberts .....	100			Minn				
Rockvale .....	100			Minn				
CASCADE CO.								
Belt .....	100			Utah	100			
Great Falls .....	100							
Sand Coulee .....	10	90		N. Y.; Wis.	50	50		Minn
CHOTEAU CO.								
Chinook .....	100			Minn.; Wis.	75	25		Minn
Ft. Benton .....	100			N. Y.	50	50		East
CUSTER CO.								
Ekalaka .....	100			Minn	100			
Stacey .....	100			Minn	100			
DEER LODGE CO.								
Deer Lodge .....	100			Wis				
Elliston .....	90	10		Minn	50	50		
Ovando .....	100			N. Y.; Wis	100			
Pioneer .....	100							
FERGUS CO.								
Judith .....	100			Minn	100	100		
Lavina .....	100							
Lewistown .....	100							
Stanford .....	10	90		Minn	100			
FLATHEAD CO.								
Kallispell .....	100				90	10	20	
Marston .....	100			East	100			
GALLATIN CO.								
Belgrade .....	20	80		Minn	100			
Bozeman .....	100			Minn	100			
Logan .....	100			Wis	100			
Manhattan .....	100				100			
GRANITE CO.								
Drummond .....	100			Wis.; N. Y.				
Garnet .....	100			Minn	40	60		Minn.; Neb.
Granite .....	100			Wis		100		Neb.; Wis.; Dak.
JEFFERSON CO.								
Boulder .....	100							
Whitehall .....	100							
LEWIS & CLARKE CO.								
East Helena .....	100			(Utah				
Helena .....	100			Minn. N. D.	5	95		Kan.; Neb.; (Mo.; Minn.
Marysville .....								

## STATEMENT SHOWING PROPORTIONATE SALES—Continued.

COUNTY AND TOWN	CHEESE.					POULTRY.				
	Per cent of Montana sold .....	Per cent of Imported sold.....	Per ct increased sale Montana product...	Per ct decreased sale Montana product.	From what states "Imported" product principally obtained.	Per cent of Montana sold.....	Per Cent of Imported sold.....	Per ct increased sale Montana product...	Per ct decreased sale Montana product.	From what states "Imported" product principally obtained.
<b>MADISON CO.</b>										
Rochester .....		100			Kan .....	100				
Sheridan .....		100			N. Y. ....	100				
Twin Bridges .....		100				85	15			
<b>MISSOULA CO.</b>										
Bonita .....		100								
Plains .....		100								
Thompson Falls .....		100			Wash... ..	50	50			Wash.....
<b>PARK CO.</b>										
Jardine .....		100			Minn .....	10	90			Idaho .....
<b>RAVALLI CO.</b>										
Corvallis .....		100				100				
Grantsdale .....										
Hamilton .....		100								
Stevensville .....	50	50			Minn .....	100				
<b>SILVER BOW CO.</b>										
Butte .....	25	75			Wis.; N. Y. Ut	05	95			Utah; Ida; (Kan.;Neb...
<b>SWEET GRASS CO.</b>										
Melville .....	10	90			Minn.. ..					
<b>TETON CO.</b>										
Shelby .....		100				25	75			
<b>VALLEY CO.</b>										
Culbertson .....		100			Wis .....		100			N. Dak.....
Glasgow .....		100			Minn .....	100				
Nashua .....		100				75	25			
Saco .....		100			Minn, .....	40	60			Minn.....
<b>YELLOWSTONE CO.</b>										
Billings .....		100			Minn .....					
Columbus .....		100			N. Y. ....	100				
Park City.....	75	25								

## STATEMENT SHOWING PROPORTIONATE SALES—Continued.

COUNTY AND TOWNS.	EGGS.				
	Per cent of Montana sold.....	Per Cent of Imported sold.....	Per ct increased sale Montana product....	Per ct decreased sale Montana product	From what states "Imported" product principally obtained.
<b>BEAVERHEAD CO.</b>					
Bannack .....		50			Ken.; Utah; Minn ..
Dillon .....	100				
Jackson .....					
<b>BROADWATER CO.</b>					
Canton .....	100				
Radersburg .....	100				
<b>CARBON CO.</b>					
Bridger .....	50	50			Neb. ....
Gebo .....	95	5			Neb. ....
Red Lodge .....	10	90			Minn. ....
Roberts .....	60	40			Utah. ....
Rockvale .....	100				
<b>CASCADE CO.</b>					
Belt .....	75	25			Minn. ....
Great Falls .....	25	75			
Sand Coulee .....	25	75			Minn.; Dak. ....
<b>CHOTEAU CO.</b>					
Chinook .....	50	50			Minn. ....
Ft. Benton .....	40	60			East. ....
<b>CUSTER CO.</b>					
Ekalaka .....	100				
Stacey .....	100				
<b>DEER LODGE CO.</b>					
Deer Lodge .....	90	10			Kan. ....
Elliston .....	75	25			Mont.; Idaho ....
Ovando .....	100				
Pioneer .....	50	50			
<b>FERGUS CO.</b>					
Judith .....	100				
Lavina .....		100			
Lewistown .....	100				
Stanford .....	100				
<b>FLATHEAD CO.</b>					
Kalispell .....	60	40	25		
Marston .....	100				
<b>GALLATIN CO.</b>					
Belgrade .....	100				
Bozeman .....	75	25			Utah. ....
Logan .....	100				
Manhattan .....	100				
<b>GRANITE CO.</b>					
Drummond .....	90	10			
Garnet .....	80	20			Minn.; Neb. ....
Granite .....	1	99			Minn.; Neb.; Wis...
<b>JEFFERSON CO.</b>					
Boulder .....	25	75			
Whitehall .....	98	2			
<b>LEWIS &amp; CLARKE CO.</b>					
East Helena .....	50	50			
Helena .....	5	95			Kan.; Neb.; Ut; Minn
Marysville .....	10	90			Idaho. ....



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## STATEMENT SHOWING PROPORTIONATE SALES—Continued.

COUNTY AND TOWNS.	EGGS.			
	Per cent of Montana sold.....	Per cent of Imported sold.....	Per cent increased sale Montana product...	Per cent decreased sale Montana product
				From what states "Imported" product principally obtained.
<b>MADISON CO.</b>				
Rochester .....	10	90		Utah .....
Sheridan .....	100			
Twin Bridges .....	75	25		
<b>MISSOULA CO.</b>				
Bonita .....	25	75		Neb. ....
Plains .....	100			
Thompson Falls ..	10	90		N. D. ....
<b>PARK CO.</b>				
Jardine .....	10	90		Minn. ....
<b>RAVALLI CO.</b>				
Corvallis .....	100			
Grantsdale .....				
Hamilton .....	90	10		
Stevensville .....	100			
<b>SILVER BOW CO.</b>				
Butte .....	05	95		Kan; NeEb; Ia; Ua.
<b>SWEET GRASS CO.</b>				
Melville .....	100			
<b>TETON CO.</b>				
Shelby .....		100		
<b>VALLEY CO.</b>				
Culbertson .....	10	90		N. D. ....
Glasgow .....	25	75		Minn. ....
Nashua .....		100		
Saco .....	75	25		Minn. ....
<b>YELLOWSTONE CO.</b>				
Billings .....	10	90		Neb. ....
Columbus .....	75	25		Dak
Park City .....	100			

STATEMENT SHOWING BY COUNTIES THE REAL ESTATE TRANSFERS MADE BY ADMINISTRATORS, GUARDIANS AND OTHERS; REAL ESTATE MORTGAGES AND CHATEL MORTGAGES AND MORTGAGES ON CHATTELS FILED, ETC., DURING THE CALENDAR YEAR 1898, AS REPORTED BY COUNTY CLERKS.

COUNTIES	Warranty Quit Claim Bargain and Sale and Mining Deeds Recorded		Executors, Administrators and Guardians Deeds Recorded		Sheriff's Deeds Recorded		Tax Title Deeds Recorded		Total Real Estate Transfers Recorded During the Year		U S Patents Recorded	
	No	Amount	No	Amount	No	Amount	No	Amount	No	Amount	Min.	Agricul't
Beaverhead .....	263	\$238,353 63	3	\$4,275 00	3	\$8,030 76	1	\$609 00	270	\$251,298 39	3	34
Broadwater .....	157	146,450 00	1	212 00	3	3,239 00	1	64 00	162	149,965 00	5	13
Carbon .....	174	153,107 00	.....	.....	.....	.....	.....	.....	174	153,107 00	3	10
Cascade .....	599	1,009,725 00	11	7,634 40	16	60,791 22	3	3,533 01	629	1,081,688 63	9	161
Choteau .....	277	149,858 00	.....	.....	3	4,378 00	.....	.....	280	154,236 00	2	67
Custer .....	196	1,969,028 27	5	1,127 00	2	1,478 75	1	4 63	204	1,971,638 65	.....	41
Dawson .....	115	2,064,747 24	3	700 00	.....	.....	.....	.....	118	2,065,447 24	.....	1
Deer Lodge .....	630	732,691 15	7	5,887 50	7	55,794 69	.....	.....	644	794,373 34	7	41
Fergus .....	495	442,380 00	2	1,100 00	5	8,669 00	1	5 00	503	452,194 00	.....	157
Flathead .....	478	291,389 86	4	1,300 00	16	24,984 13	.....	.....	498	317,673 99	.....	110
Gallatin .....	441	438,903 09	9	9,847 00	5	4,886 53	7	76 22	462	453,712 84	.....	47
Granite .....	202	498,829 65	4	5,498 00	5	49,114 38	.....	.....	211	553,442 03	.....	28
Jefferson .....	607	.....	15	.....	21	.....	3	.....	646	.....	.....	13
Lewis and Clarke .....	434	9,535,509 82	14	6,401 13	44	290,581 18	2	106 81	494	9,832,598 94	6	39
Madison .....	580	285,973 00	3	706 00	9	19,499 00	.....	.....	532	306,177 00	16	33
Meagher .....	115	167,392 46	1	3,800 00	7	16,965 45	3	955 55	126	189,113 46	1	16
Missoula .....	411	211,176 19	34	20,422 00	7	5,964 07	3	101 02	455	237,663 21	1	18
Park .....	248	213,001 89	6	6,035 00	10	7,884 42	4	254 52	268	227,225 83	6	30
Ravalli .....	314	212,987 00	9	8,440 00	6	3,945 00	17	394 00	346	225,766 00	.....	41
Silver Bow .....	1733	5,692,552 46	15	13,849 00	16	43,214 10	10	103 14	1774	5,749,718 70	13	1
Sweet Grass .....	103	91,702 01	5	7,535 1	3	26,728 37	.....	.....	111	126,025 38	.....	24
Teton .....	131	88,693 85	2	410 00	2	9,290 00	.....	.....	135	98,333 85	.....	33
Valley .....	43	14,856 15	.....	.....	.....	.....	.....	.....	43	14,856 15	.....	.....
Yellowstone .....	241	190,707 93	4	976 40	7	10,249 41	7	75 34	259	202,009 08	.....	25
Total .....	8887	\$24,840,045 66	157	\$106,254 43	197	\$655,537 39	63	\$6,287 24	9404	\$25,608,224 72	85	990

STATEMENT SHOWING BY COUNTIES THE REAL ESTATE TRANSFERS MADE IN 1898—Continued.

COUNTIES	Real Estate Mortgages Recorded			Satisfactions Entered			Per Cent of NUMBER of Mortgages Satisfied in each County as Compared With Mortgages Recorded During the Year			Chattel Mortgages			Mechanics Lien			Total Real Estate and Chattel Mortgages Filed and Recorded			Per Ct. of Total No of Real Est. and Ch'tle Mortg's Recorded and filed by each County		Per ct. of total Amt. inv'ted in all Mortgages filed by each County	
	No	Amount		No	Am't		No	Am't		No	Am't		No	Am't		No	Am't		No	Am't	No	Am't
Beaverhead .....	42	\$74,114 80		13	\$7,436 00		30 95			75	\$83,506 23		29	\$62,853 62		117	\$157,021 03		156		1 46	
Broadwater .....	42	120,097 00		27	26,876 00		64 29			84	120,622 00		8	165,776 00		126	240,719 00		1 68		2 23	
Carbon .....	51	132,720 00		26	10,370 00		33 22			348	430,108 00		7	769 00		299	562,828 00		5 33		5 20	
Cascade .....	304	351,384 00		171	654,137 00		56 54			333	317,637 33		13	1,969 26		637	669,021 33		8 51		6 19	
Chouteau .....	65	56,972 00		38	31,008 00		58 46			140	256,057 60		3	262 00		205	313,029 00		2 74		2 90	
Custer .....	85	80,626 74		30	41,997 29		35 30			256	465,131 17		30	41,997 29		341	545,757 91		4 56		5 05	
Dawson .....	15	7,876 00		16	7,614 92		106 67			89	242,556 44		1	89 92		104	250,432 44		1 39		2 31	
Deer Lodge .....	344	442,250 19		273	271,965 30		79 36			197	108,716 29		86	35,990 85		541	550,966 48		7 23		5 09	
Fergus .....	162	263,522 00		104	190,798 00		64 30			247	484,306 00		30	6,565 00		409	747,828 00		5 46		6 91	
Flathead .....	74	123,022 02		205	150,000 24		127 33			189	75,084 61		21	5,428 46		350	198,106 63		4 65		1 83	
Gallatin .....	16	192,532 59		110	100,000 00		68 75			357	263,297 18		7	1,698 40		517	445,739 77		6 91		4 12	
Granite .....	38	55,564 23		...	17,177 98		...			67	82,743 49		36	4,088 02		105	138,307 72		1 40		1 23	
Jefferson .....	67	82,500 23		64	48,089 60		96 52			83	40,500 01		57	10,564 71		150	123,000 24		2 06		1 14	
Lewis and Clarke .....	165	1,627,422 35		181	459,337 00		109 70			166	220,642 20		23	6,621 13		331	1,818,064 58		4 42		17 09	
Madison .....	103	97,896 00		58	84,165 00		56 33			142	188,330 00		13	2,385 00		245	256,226 00		3 28		2 64	
Meagher .....	35	103,421 50		80	...		228 57			74	283,478 74		2	1,239 95		109	386,900 24		1 46		3 58	
Missoula .....	123	159,531 90		163	165,424 31		132 52			142	157,964 53		21	203 59		265	317,496 43		3 54		2 93	
Park .....	64	51,497 54		81	62,014 59		126 56			124	74,865 74		4	1,076 71		188	126,353 28		2 51		1 17	
Ravalli .....	136	99,356 00		122	98,485 00		89 71			121	74,915 00		4	379 00		257	174,871 00		3 43		1 62	
Silver Bow .....	670	1,309,410 62		508	736,030 59		75 82			719	316,900 22		212	117,237 03		1389	1,626,310 84		18 56		15 04	
Sweet Grass .....	52	61,562 41		63	82,059 59		121 16			178	283,591 54		10	3,731 29		220	345,153 96		3 07		3 19	
Teton .....	35	38,162 90		22	49,509 12		91 43			150	290,498 26		1	68 49		185	328,661 16		2 47		3 04	
Valley .....	4	1,029 22		2	350 12		50 00			24	58,115 62		1	12 65		28	59,144 84		38		55	
Yellowstone .....	72	107,817 14		73	83,736 86		101 39			182	264,314 95		2	40 91		254	372,132 09		3 40		3 44	
Total .....	2996	\$5,640,889 41		434	\$3,079,731 62		...			4487	\$5,173,782 55		602	\$170,870 28		7482	\$10,814,671 96		100 00		100 00	



STATEMENT SHOWING BY COUNTIES THE REAL ESTATE TRANSFERS MADE BY ADMINISTRATORS, GUARDIANS AND OTHERS; REAL ESTATE MORTGAGES AND SATISFACTION S; CHATTEL MORTGAGES AND MCHANICS LIENS FILED, ETC., DURING THE CALENDAR YEAR 1899, AS REPORTED BY COUNTY CLERKS.

COUNTIES.	Warranty, Quit Claim Bargain and Sale and Mining Deeds Recorded .....		Executors, Administrators and Guardians Deeds Recorded .....		Sheriffs' Deeds Recorded .....		Tax Title Deeds Recorded .....		Total Real Estate Transfers Recorded During the Year...		U S. Patents Recorded .....	
	No.	Amount.	No.	Amount.	No.	Amount.	No.	Amount.	No.	Amount.	Min-eral.	Agri-cultural.
Beaverhead .....	250	\$222,888 00	1	\$900 00	...	...	2	\$1,492 59	253	\$225,280 59	...	25
Broadwater .....	180	250,360 00	2	1,210 00	...	...	...	...	182	251,570 00	...	28
Carbon .....	199	73,935 00	...	...	3	1,726 00	...	...	202	75,661 00	4	26
Cascade .....	561	492,805 94	9	4,322 00	22	52,319 17	30	884 33	622	550,331 44	10	153
Choteau .....	322	212,645 00	6	9,375 00	2	874 00	3	33 00	333	222,927 00	1	95
Custer .....	233	137,321 98	4	2,102 00	4	1,863 33	1	4 80	242	141,292 11	...	56
Dawson .....	87	30,688 51	...	...	...	...	1	1 64	88	30,670 15	...	4
Deer Lodge .....	639	653,862 55	8	3,450 00	9	17,017 40	...	...	656	674,329 95	6	20
Fergus .....	555	624,124 00	3	14,400 00	10	54,001 00	1	10	569	692,535 00	4	171
Flathead .....	575	539,468 42	6	4,210 00	9	9,939 81	...	...	590	553,618 23	2	113
Gallatin .....	389	636,691 92	4	2,800 00	6	12,597 02	...	...	399	652,088 94	...	63
Granite .....	168	129,834 73	6	2,583 50	4	17,700 00	6	100 59	184	150,218 82	...	5
Jefferson .....	383	...	12	...	15	...	33	...	443	...	16	12
Lewis and Clarke .....	599	1,036,471 72	18	12,847 12	26	99,221 02	9	397 73	652	1,148,937 59	5	39
Madison .....	492	388,036 00	7	5,065 00	7	5,502 00	...	...	506	408,603 00	44	35
Meagher .....	105	218,505 41	3	1,178 65	3	9,966 34	3	40 67	114	229,681 07	...	32
Missoula .....	706	554,591 80	39	30,407 50	12	19,914 09	13	207 06	770	605,120 45	2	62
Park .....	342	5,607,016 87	2	300 00	9	14,585 81	7	290 92	360	5,622,193 60	5	37
Ravalli .....	512	400,552 00	4	3,200 00	7	5,145 00	6	269 00	529	409,166 00	...	74
Silver Bow .....	1625	2,441,333 15	19	38,664 60	14	110,186 49	14	41 04	1672	2,590,295 28	46	1
Sweet Grass .....	137	186,059 32	...	...	3	4,480 09	1	40 22	141	190,579 63	...	...
Teton .....	189	63,719 15	6	3,922 02	6	3,099 50	1	23 64	202	70,764 31	...	55
Valley .....	61	19,995 57	...	...	3	1,270 00	2	41 03	63	20,036 60	...	11
Yellowstone .....	410	246,125 34	9	12,064 50	3	...	24	1,369 45	446	259,829 29	...	13
Total .....	9719	\$15,166,012 38	168	\$153,001 89	174	\$451,408 07	157	\$5,237 81	10218	\$15,775,670 05	145	1131

## SEVENTH ANNUAL REPORT OF BUREAU

STATEMENT SHOWING BY COUNTIES THE REAL ESTATE TRANSFERS MADE IN 1899—Continued.

COUNTIES.	Real Estate Mortgages Recorded .....		Satisfactions Entered.		Pr ct of No. of mtgs satisfied in Co as compared with mtgs recorded during year.		Chattel Mortgages Filed .....		Mechanic's Liens Filed .....		Total Real Estate and Chattel Mortgages Filed and Recorded		Per Cent. of Total Amount Invested in all Mortgages Filed by Each County .....	
	No.	Amount.	No.	Amount.	No.	Amount.	No.	Amount.	No.	Amount.	No.	Amount.	No.	Amount.
Beaverhead .....	30	\$61,300 00	16	\$29,736 00	53.33	\$88,154 86	20	\$12,191 50	134	\$149,454 86	1.60	1.36		
Broadwater .....	39	48,197 00	32	52,134 00	82.06	39,421 00	2	590 00	100	87,619 00	1.17	.80		
Carbon .....	67	39,545 00	27	15,374 00	40.30	331,593 00	33	6,572 00	547	371,138 00	6.54	3.38		
Cascade .....	264	330,398 54	227	652,930 35	85.98	347,145 33	5	1,391 65	715	677,543 87	8.56	6.17		
Choteau .....	56	78,190 00	40	52,283 00	71.43	318,515 33	2	145 00	194	396,705 00	2.32	3.61		
Custer .....	47	72,679 53	26	18,162 42	55.32	504,210 69	3	186 46	380	576,890 22	4.55	5.25		
Dawson .....	33	20,174 34	10	6,403 00	30.30	134,554 64	6	1,442 29	147	154,728 98	1.76	1.41		
Deer Lodge .....	255	329,233 84	280	305,402 32	109.80	105,761 92	48	20,947 97	460	434,965 76	5.52	3.96		
Fergus .....	165	364,017 00	160	101,833 00	60.61	616,225 01	17	2,212 00	514	980,242 00	6.15	8.92		
Flathead .....	195	146,674 19	156	100,073 55	80.00	169,417 34	29	2,728 69	413	316,091 53	4.94	2.88		
Gallatin .....	229	579,731 06	114	150,000 00	49.78	167,688 27	6	14,321 08	740	747,419 33	8.86	6.80		
Granite .....	28	29,571 02	33	24,701 90	117.86	51,458 35	4	603 52	95	81,029 37	1.14	.74		
Jefferson .....	40	31,248 00	43	29,628 87	107.50	39,731 26	17	2,250 49	107	70,982 26	1.29	.64		
Lewis and Clarke .....	33	1,639,083 62	228	490,177 08	245.16	141,536 93	6	508 76	224	1,780,630 55	2.69	16.21		
Madison .....	103	115,662 00	63	81,145 00	61.17	175,121 00	11	1,735 00	242	290,783 00	2.00	2.65		
Meagher .....	18	97,321 61	37	.....	205.55	221,260 57	5	613 99	69	318,528 18	.83	2.90		
Missoula .....	176	152,561 25	213	267,440 70	121.02	106,563 23	7	407 78	297	259,124 48	3.56	2.36		
Park .....	83	75,725 60	61	116,273 31	73.50	103,766 32	15	43,112 63	239	179,491 92	2.86	1.63		
Ravalli .....	145	100,781 00	175	108,545 00	120.69	74,800 00	.....	.....	248	175,581 00	2.97	1.60		
Silver Bow .....	687	1,064,381 75	572	1,785,183 89	83.26	353,611 29	32	28,681 45	1678	1,417,993 04	20.08	13.00		
Sweet Grass .....	50	90,723 86	43	68,728 80	86.00	336,800 07	4	3,771 86	230	427,523 93	2.75	3.89		
Teton .....	63	135,842 95	31	102,197 44	49.21	369,951 21	3	612 23	233	505,794 16	2.76	4.60		
Valley .....	12	7,778 37	2	4,169 22	16.66	76,888 70	.....	.....	56	84,667 07	.67	.77		
Yellowstone .....	100	215,556 70	78	166,144 92	78.00	286,213 68	13	1,672 08	285	501,775 38	3.53	4.57		
Total .....	2978	\$5,826,388 23	2607	\$4,734,664 77	81.26	\$5,160,343 66	388	\$146,867 26	8357	\$10,986,732 91	100.00	100.00		

## STATEMENT SHOWING RECEIPTS AND EXPENDITURES DURING THE FISCAL YEAR ENDING NOVEMBER 30, 1899 AND 1900, AS REPORTED BY THE STATE TREASURER.

FUND	RECEIPTS.			DISBURSEMENTS.		
	Balance on hand Dec. 1, 1898.....	Received during year ending Nov. 30, 1900.....	Total.....	Disbursed during the year ending Nov. 30, 1900.....	Balance on hand Dec. 1, 1900.....	Total.....
Permanent School .....	\$87,179 19	\$241,790 15	\$328,969 14	\$193,609 40	\$119,417 54	\$420,612 99
School Income .....	37,928 08	90,880 90	128,808 98	58,957 83	90,370 83	246,825 18
University Bond .....	16,385 72	7,319 94	23,705 66	6,434 85	19,667 74	32,211 08
Normal School .....	7,444 48	15,901 53	23,346 01	11,038 26	31,295 19	42,458 46
Normal School Bond .....	2,216 89	21,817 95	24,034 84	4,757 71	33,444 96	41,847 62
Agricultural College Bond .....	824 02	9,454 82	10,278 84	6,118 27	1,120 81	21,145 04
Deaf and Dumb Asylum Building .....	2,144 50	49,230 01	51,374 51	13,905 96	1,120 81	21,145 04
Reform School Building .....	175 84	2,318 40	2,494 24	2,441 47	163 75	53,885 65
State Capitol Building .....	13,878 11	281,540 22	295,418 33	82,136 71	3,625 97	4,858 24
School of Mines Building .....	1,362 88	5,796 73	7,159 61	1,390 95	67,319 67	78,461 95
General .....	2 70	571,450 22	571,452 92	13,905 96	64,615 49	133,149 64
Stock Inspector and Detective .....	11,283 37	19,627 32	30,910 69	587,677 05	71 28	1,151,243 54
Stock Indemnity .....	8,762 14	4,523 90	13,286 04	19,042 50	18,779 00	62,283 29
Sheep Inspector and Indemnity .....	4,581 13	3,836 37	8,417 50	3,116 00	8,413 11	15,975 11
State Bounty .....	9,638 46	97,382 40	107,020 86	2,639 70	6,247 59	11,924 03
Fish and Game .....	544 85	122 50	667 35	142,745 50	14,394 43	248,414 93
University Library .....	2,633 10	1,394 06	4,027 16	276 61	48 22	807 85
State Law Library .....	50 34	476 10	526 44	1,830 86	.....	5,611 01
Medical Board .....	89 70	570 00	659 70	287 93	116 74	822 92
State Examiner's .....	.....	3,350 00	3,350 00	659 15	145 45	1,267 95
Escheated Estates .....	7,101 06	281 15	7,382 21	3,675 00	.....	7,025 00
Soldiers' Home .....	.....	4,144 99	4,144 99	1,927 97	7,852 76	10,476 22
Capitol Building Interest and Sinking .....	.....	6,859 83	6,859 83	5,057 47	2,882 14	10,707 49
Beautifying State Capitol Grounds .....	3,238 75	6 25	3,245 00	2,032 00	1,725 40	10,614 73
University Building .....	38,149 16	464 40	38,613 56	2,500 00	751 25	3,251 25
Agricultural College Income .....	.....	7,422 41	7,422 41	13 80	64 48	38,613 56
Agricultural College from United States .....	.....	25,000 00	25,000 00	21 00	14,191 53	15,374 46
Horticultural Board .....	.....	359 04	359 04	.....	.....	20
Arid Land District No. 1, Fund "A" .....	20	.....	20	.....	.....	1,666 50
Trans-Mississippi Exposition .....	5 34	1,305 45	1,310 79	25,000 00	.....	1,310 79
Arid Land District No. 2, Fund "A" .....	.....	1,666 50	1,666 50	643 90	.....	50,000 00
Total .....	\$255,719 98	\$1,476,293 24	\$1,732,013 22	\$1,323,723 00	\$514,627 16	\$2,246,640 38

The following state institutions have issued bonds secured by the several land grants:

State Agricultural College, dated July 1, 1895, 10-25 years, 6 per cent .....	\$100,000
State Normal School, dated July 1, 1895, 10-25 years, 6 per cent .....	50,000
State University, dated July 1, 1897, 20-30 years, 6 per cent .....	100,000
Deaf and Dumb Asylum, dated July 1, 1897, 15-30 years, 6 per cent .....	40,000
State Capitol Building, dated July 1, 1898, 15-30 years, 6 per cent .....	350,000
State School of Mines, dated July 1, 1900, 15-30 years, 5 per cent .....	120,000

Total .....

Note.—The state is not responsible for the interest or principal of the above mentioned bonds. Nor is it liable for warrants or the interest on warrants issued by the state institutions, of which there is outstanding, principal and interest, \$105,432.34. The amount of warrants outstanding against the General Fund of the State is \$243,970.07; interest on same \$3,500.00. Total, \$247,470.07.



## FINANCES OF THE COUNTIES.

The Financial Condition of the Counties of the State for the Fiscal Year Ending Nov. 30, 1899.

## BEAVERHEAD COUNTY.

	General Fund..	Contingent Fund .....	Road and Bridge Fund.	Poor Fund .....	Institute Fund .....	Bond, Interest and Sinking Fund .....	Bonds, 6 Per Cent...	Bonds, 7 Per Cent....	Bonds, 5 Per Cent....	Total.....
Gross Indebtedness December 1, 1898, (being all unpaid Warrants and Bonds and accrued interest on the same) .....	\$6,311 48	\$3,957 13	\$13,852 86	\$3,087 54	.....	\$1,854 29	\$60,000 00	\$20,000 00	.....	\$109,063 30
Warrants issued during fiscal year ending Nov. 30, 1899 .....	7,982 78	20,818 26	14,604 40	7,009 70	.....	.....	.....	.....	.....	50,475 14
Bonds issued during fiscal year ending Nov. 30, 1899 .....	.....	.....	.....	.....	.....	.....	.....	\$20,000 00	.....	20,000 00
Bond and Warrant interest accruing year ending Nov. 30, 1899 .....	9 15	104 50	494 92	100 90	.....	2,320 40	.....	.....	.....	3,029 87
Total .....	\$14,303 41	\$24,879 89	\$28,952 18	\$10,258 14	.....	\$4,174 69	\$60,000 00	\$20,000 00	\$20,000 00	\$182,568 31
Warrants paid and cancelled during fiscal year ending Nov. 30, 1899 .....	\$7,680 78	22,710 10	\$10,772 97	\$4,588 78	.....	.....	.....	.....	.....	45,752 63
Bonds paid during fiscal year ending Nov. 30, 1899 .....	.....	.....	.....	.....	.....	.....	.....	20,000 00	.....	20,000 00
Bond and Warrant interest paid during fiscal year ending Nov. 30, 1899 .....	9 15	104 50	494 92	100 90	.....	2,320 40	.....	.....	.....	3,029 87
Total .....	\$7,689 93	\$22,814 60	\$11,267 89	\$4,689 68	.....	\$2,320 40	.....	\$20,000 00	.....	\$68,782 50
Gross debt Nov. 30, 1899 .....	\$6,612 48	2,065 29	\$17,684 29	\$5,568 46	.....	1,854 29	\$60,000 00	.....	\$20,000 00	\$113,785 81
Money in Treasury on Nov. 30, 1899 .....	37,597 69	704 24	14,263 68	1,554 59	41 00	1,220 74	.....	.....	.....	55,371 85
Net balance Nov. 30, 1899 .....	*30,984 12	\$1,351 05	\$3,420 61	\$4,023 87	*\$41 00	633 55	\$60,000 00	.....	\$20,000 00	\$58,413 91
Net balance at end of previous fiscal year .....	*18,421 17	2,883 90	12,954 65	1,698 27	*2 90	1,733 62	60,000 00	\$20,000 00	.....	80,862 27
Decrease in net indebtedness .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	\$22,498 31

\* Denote credits.

## BROADWATER COUNTY.

	General Fund..	Contingent Fund .....	Road and Bridge Fund.	Poor Fund .....	Bond, Interest and Sinking Fund .....	Bonds, 6 Per Cent...	Total.....
Gross Indebtedness December 1, 1898, (being unpaid Warrants and Bonds and accrued interest on the same) .....	\$219 82	\$18,047 35	\$3,060 47	\$1,343 31	\$930 00	\$62,000 00	\$90,540 95
Warrants issued during fiscal year ending Nov. 30, 1899 .....	6,524 99	16,286 66	5,968 54	2,797 34	.....	.....	31,577 53
Bond and Warrant interest accruing year ending Nov. 30, 1899 .....	.....	608 97	215 98	48 99	2,790 00	.....	3,663 94
Total .....	\$6,744 81	\$34,942 98	\$14,184 99	\$4,189 64	\$3,720 00	\$62,000 00	\$125,782 42
Warrants paid and cancelled during fiscal year ending Nov. 30, 1899 .....	6,200 24	10,899 72	5,826 82	2,345 42	.....	.....	25,272 20
Bond and Warrant interest paid during fiscal year ending Nov. 30, 1899 .....	.....	608 97	215 98	48 99	3,720 00	.....	4,593 94
Total .....	\$6,200 24	\$11,508 69	\$6,042 80	\$2,394 41	\$3,720 00	.....	\$29,866 14
Gross debt Nov. 30, 1899 .....	544 57	23,434 29	8,142 19	1,795 23	.....	62,000 00	95,916 28
Money in Treasury on Nov. 30, 1899 .....	*11,985 38	11,685 22	6,750 45	2,355 88	.....	.....	32,776 93
Net balances at end of previous fiscal year .....	*\$11,440 81	\$11,719 07	\$1,391 74	*\$560 65	.....	\$62,000 00	\$63,139 35
Net balances at end of previous fiscal year .....	*6,036 47	14,108 33	6,148 96	36 56	.....	62,000 00	76,257 38
Decrease in net indebtedness .....	.....	.....	.....	.....	.....	.....	\$13,140 86

\* Denote credits.

## SEVENTH ANNUAL REPORT OF BUREAU

## CARBON COUNTY.

	General Fund..	Contingent Fund .....	Road Fund.....	Poor Fund .....	Bridge Fund....	Contingent Expense Fund .....	Institute Fund .....	Bond, Interest and Sinking Fund .....	Bonds, 6 Per Cent...	Total .....
Gross Indebtedness December 1, 1898, (being all unpaid Warrants and Bonds and accrued interest on the same) .....	\$1,304 80	\$2,946 10	\$8,795 35	\$8 00					\$57,000 00	\$70,054 25
Warrants issued during fiscal year ending Nov. 30, 1899 .....	28,944 46	15,185 40	15,179 51	951 89		435 04				60,696 29
Bond and Warrant interest accruing year ending Nov. 30, 1899 .....	45 12	98 57	343 91					\$3,427 72		3,915 32
Total .....	\$30,294 37	\$18,230 07	\$24,318 77	\$959 89		\$435 04		\$3,427 72	\$57,000 00	\$134,665 86
Warrants paid and cancelled during fiscal year ending Nov. 30, 1899 .....	11,842 39	12,060 90	6,907 03	959 89		431 04				32,201 25
Bond and Warrant interest paid during fiscal year ending Nov. 30, 1899 .....	45 12	98 57	343 91					3,427 72		3,915 32
Total .....	\$11,887 51	\$12,159 47	7,250 94	\$959 89		\$431 04		\$3,427 72		\$36,116 57
Gross debt Nov. 30, 1899 .....	18,406 86	6,070 60	17,067 83			4 00			\$57,000 00	98,549 29
Money in Treasury on Nov. 30, 1899 .....	9,472 53	9,863 39	7,198 87	3,489 94	\$2,099 30	100 38	\$36 00	4,122 30		36,387 71
Net balance Nov. 30, 1899 .....	\$8,934 33	\$3,197 79	\$9,868 96	\$3,489 94	\$2,099 30	*46 38	*\$36 00	*\$4,122 30	\$57,000 00	\$62,161 58
Net balance at end of previous fiscal year .....	*2,340 25	194 50	6,134 25	*1,612 23	*935 21	*44 06			56,142 74	56,538 69
Decrease in net indebtedness .....										\$5,622 89

\* Denote credits.



## CASCADE COUNTY.

	General Fund..	Contingent Fund .....	Road Fund.....	Poor Fund .....	Bridge Fund....	Institute Fund .....	Bond, Interest and Sinking Fund .....	Bonds, 6 Per Cent...	Bonds, 7 Per Cent....	Total.....
Gross Indebtedness December 1, 1898, (being all unpaid Warrants and Bonds and accrued interest on the same) .....	\$759 29	\$670 81	\$368 97	\$193 91	.....	.....	.....	\$9,722 43	\$225,943 19	\$135,776 00
Warrants issued during fiscal year ending Nov. 30, 1899 .....	40,599 71	42,583 60	30,385 24	12,988 47	.....	5 00	.....	.....	.....	126,562 02
Bond and Warrant interest accruing year ending Nov. 30, 1899 .....	.....	.....	.....	.....	.....	.....	22,571 18	.....	.....	22,571 18
Total .....	\$41,359 00	\$43,254 41	\$30,754 21	\$13,182 38	.....	5 00	\$32,293 61	\$225,943 19	\$135,776 00	\$522,567 80
Warrants paid and cancelled during fiscal year ending Nov. 30, 1899 .....	40,652 23	42,663 07	30,631 96	13,164 68	.....	5 00	.....	.....	.....	127,116 94
Bond and Warrant interest paid during fiscal year ending Nov. 30, 1899 .....	.....	.....	.....	.....	.....	.....	22,571 18	.....	.....	22,571 18
Total .....	\$40,652 23	\$42,663 07	\$30,631 96	\$13,164 68	.....	5 00	\$22,571 18	.....	.....	\$149,688 12
Gross debt Nov. 30, 1899 .....	706 77	591 34	122 25	17 70	.....	.....	9,722 43	225,943 19	135,776 00	372,879 68
Money in Treasury on Nov. 30, 1899 .....	99,959 13	4,401 84	17,393 57	5,640 90	.....	146 25	9,722 43	.....	.....	127,541 69
Net balance Nov. 30, 1899 .....	*99,252 36	*\$3,810 50	*17 271 32	*\$5,623 20	.....	*146 25	.....	\$225,943 19	\$135,776 00	\$245,337 90
Net balance at end of previous fiscal year .....	*37,978 30	*9,336 86	*6,299 39	*9,315 87	*1 28	*70 25	.....	225,043 19	135,776 00	308,439 67
Decrease in net indebtedness .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	\$63,101 68

\* Denote credits.

## SEVENTH ANNUAL REPORT OF BUREAU

## CHOTEAU COUNTY.

	General Fund...	Contingent Fund .....	Road Fund.....	Poor Fund .....	Bridge Fund....	Bond, Interest and Sinking Fund .....	Bonds, 6 Per Cent...	Total.....
Gross Indebtedness December 1, 1898, (being all unpaid Warrants and Bonds and accrued interest on the same) .....	\$825 76	\$13 82	\$25 58	\$6 00	.....	\$50,000 00	\$200,000 00	\$206,871 16
Warrants issued during fiscal year ending Nov. 30, 1899 .....	28,020 97	19,245 37	10,152 05	9,449 69	8,132 32	.....	.....	75 000 40
Bond and Warrant interest accruing year ending Nov. 30, 1899 .....	.....	.....	.....	.....	.....	12,033 95	.....	12,033 95
Total .....	\$28,846 73	\$19,259 19	\$10,177 63	\$9,455 69	\$8,132 32	\$17,033 96	\$200,000 00	\$292,945 51
Warrants paid and cancelled during fiscal year ending Nov. 30, 1899 .....	28,583 48	19,245 37	10,115 38	9,429 94	8,105 32	.....	.....	75,479 49
Bond and Warrant interest paid during fiscal year ending Nov. 30, 1899 .....	20 88	.....	.....	.....	.....	12,033 95	.....	12,064 83
Total .....	\$28,604 36	\$19,245 37	\$10,115 38	\$9,429 94	\$8,105 32	\$12,033 95	.....	\$37,534 32
Gross debt Nov. 30, 1899 .....	242 37	13 82	62 25	25 75	27 00	5,000 00	200,000 00	205,371 19
Money in Treasury on Nov. 30, 1899 .....	34,758 66	19,724 47	12,089 98	12,623 19	7,441 68	10,765 40	.....	97,403 38
Net balance Nov. 30, 1899 .....	*\$34,516 29	*19,710 65	*\$12,027 73	*\$12,597 44	*\$7,414 68	*\$5,765 40	\$200,000 00	\$107,967 81
Net balance at end of previous fiscal year .....	*18,248 50	*11,659 95	*6,820 06	*4,838 48	*3,511 04	*1,863 70	200,000 00	153,058 27
Decrease in net indebtedness .....	.....	.....	.....	.....	.....	.....	.....	45,090 45

\* Denote credits.

## CUSTER COUNTY.

	General Fund..	Contingent Fund .....	Road Fund.....	Poor Fund .....	Bridge Fund....	Bond, Interest and Sinking Fund .....	Bonds, 6 Per Cent...	Total.....
Gross Indebtedness December 1, 1898, (being all unpaid Warrants and Bonds and accrued interest on the same) .....								
Warrants issued during fiscal year ending Nov. 30, 1899 .....	\$16,523 19	\$4,654 79	\$1,464 16	\$1,419 56	22 00	\$6,850 00	\$274,000 00	\$304,923 70
Bond and Warrant interest accruing year ending Nov. 30, 1899 .....	25,495 12	15,419 66	9,110 99	4,573 34	1,816 75	.....	.....	56,415 86
Total .....	\$42,018 31	\$20,074 45	\$10,585 19	\$5,992 90	\$1,838 75	\$16,440 00	\$274,000 00	\$377,799 60
Warrants paid and cancelled during fiscal year ending Nov. 30, 1899 .....	40,600 97	20,018 20	9,506 59	5,970 18	1,838 75	.....	.....	77,934 69
Bond and Warrant interest paid during fiscal year ending Nov. 30, 1899 .....	366 96	56 25	19 76	22 72	.....	\$16,440 00	.....	16,905 68
Total .....	\$40,967 92	\$20,074 45	\$9,526 35	\$5,992 90	\$1,838 75	\$16,440 00	.....	\$94,840 37
Gross debt Nov. 30, 1899 .....	1,050 39	.....	1,058 84	.....	.....	6,850 00	274,000 00	282,959 23
Money in Treasury on Nov. 30, 1899 .....	48,575 70	10,354 68	9,818 06	5,328 26	11,010 93	24,303 72	.....	109,391 35
Net balance Nov. 30, 1899 .....	\$47,525 31	\$10,354 68	\$8,759 22	\$5,328 26	*\$11,010 93	*\$17,453 72	274,000 00	173,567 88
Net balance at end of previous fiscal year .....	*10,182 31	*1,979 48	*2,974 10	*1,402 84	*2,138 66	*5,007 72	274,000 00	250,314 89
Decrease in net indebtedness .....	.....	.....	.....	.....	.....	.....	.....	\$76,747 01

\* Denote credits.



## SEVENTH ANNUAL REPORT OF BUREAU

## DAWSON COUNTY.

	General Fund..	Contingent Fund .....	Road Fund.....	Poor Fund .....	Bridge Fund....	Bond, Interest Fund .....	Bond, Interest and Sinking Fund .....	Bonds, 6 Per Cent...	Bonds, 7 Per Cent....	Total.....
Gross Indebtedness December 1, 1898, (being all unpaid Warrants and Bonds and accrued interest on the same) .....	\$108 00	\$11,755 43	\$6 00	\$4 70	.....	.....	\$2,610 00	\$89,000 00	\$11,000 00	\$114,484 13
Warrants issued during fiscal year ending Nov. 30, 1899 .....	10,196 20	13,681 59	2,241 87	1,296 58	.....	.....	.....	.....	.....	27,416 24
Bond and Warrant interest accruing year ending Nov. 30, 1899 .....	.....	58 18	.....	.....	.....	.....	6,110 00	.....	.....	6,168 18
Total .....	\$10,304 20	\$25,495 20	\$2,247 87	\$1,301 28	.....	.....	\$8,720 00	\$89,000 00	\$11,000 00	\$148,068 55
Warrants paid and cancelled during fiscal year ending Nov. 30, 1899 .....	10,156 25	20,471 55	2,216 37	1,296 58	.....	.....	.....	.....	.....	34,140 76
Bond and Warrant interest paid during fiscal year ending Nov. 30, 1899 .....	.....	629 82	.....	.....	.....	.....	6,215 00	.....	.....	6,844 82
Total .....	\$10,156 25	\$21,101 38	\$2,216 37	\$1,296 58	.....	.....	\$6,215 00	.....	.....	\$40,985 58
Gross debt Nov. 30, 1899 .....	147 95	4,393 82	31 50	4 70	.....	.....	2,505 00	89,000 00	11,000 00	107,082 97
Money in Treasury on Nov. 30, 1899 .....	12,469 24	1,426 11	4,129 33	5,878 44	5,305 37	9,312 39	6,242 17	.....	.....	44,753 05
Net balance Nov. 30, 1899 .....	*12,311 29	\$2,967 71	*\$4,097 83	*\$5,873 74	*\$5,305 37	*\$9,312 39	*\$3,737 17	*\$9,000 00	*\$11,000 00	\$62,329 92
Net balance at end of previous fiscal year .....	*9,072 27	9,656 67	*3,363 13	*3,728 10	*1,457 39	.....	*1,314 44	89,000 00	11,000 00	\$9,720 84
Decrease in net indebtedness .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	\$28,390 42

\* Denote credits.

## DEER LODGE COUNTY.

	General Fund..	Contingent Fund .....	Road Fund.....	Poor Fund .....	Bridge Fund.	Court House Fund.....	Bond, Interest and Sinking Fund .....	Bonds, 5 Per Cent...	Total.....
Gross Indebtedness December 1, 1898, (being all unpaid Warrants and Bonds and accrued interest on the same) .....	\$42,343 72	\$2,119 06	\$4,191 27	\$2,575 68	\$0 12	.....	\$386 33	\$200,000 00	\$251,616 18
Warrants issued during fiscal year ending Nov. 30, 1899 .....	44,998 71	40,770 70	16,193 09	20,684 35	4,582 96	66,891 76	.....	.....	194,121 57
Bonds issued during fiscal year ending Nov. 30, 1899 .....	.....	.....	.....	.....	.....	.....	.....	50,000 00	50,000 00
Bond and Warrant interest accruing year ending Nov. 30, 1899 .....	.....	.....	.....	.....	.....	.....	13,942 77	.....	13,942 77
Total .....	\$87,342 43	\$42,889 76	\$20,384 36	\$23,260 03	\$4,583 08	\$66,891 76	\$14,329 10	\$250,000 00	\$509,680 52
Warrants paid and cancelled during fiscal year ending Nov. 30, 1899 .....	39,553 69	40,615 87	8,841 17	14,681 96	4,352 19	66,891 76	.....	.....	174,936 64
Bond and Warrant interest paid during fiscal year ending Nov. 30, 1899 .....	.....	.....	.....	.....	.....	.....	13,942 77	.....	13,942 77
Total .....	\$39,553 69	\$40,615 87	\$8,841 17	\$14,681 96	\$4,352 19	\$66,891 76	\$13,942 77	.....	\$138,879 41
Gross debt Nov. 30, 1899 .....	47,788 74	2,273 89	11,543 19	8,578 07	230 89	.....	386 33	250,000 00	320,801 11
Money in Treasury on Nov. 30, 1899 .....	44,197 15	.....	9,353 84	14,946 07	3,946 62	18,183 38	16,741 64	.....	108,810 51
Net balance Nov. 30, 1899 .....	\$3,591 59	\$5,832 08	\$2,189 35	\$36,368 00	\$3,715 73	\$18,183 38	\$16,355 31	\$250,000 00	\$216,990 60
Net balance at end of previous fiscal year .....	45,768 75	\$5,117 44	\$2,062 78	\$945 57	\$2,462 48	\$34,126 82	\$6,850 62	200,000 00	194,203 04
Increase in net indebtedness .....	.....	.....	.....	.....	.....	.....	.....	.....	\$22,787 56

\* Denote credits.

## SEVENTH ANNUAL REPORT OF BUREAU

## FLATHEAD COUNTY.

	General Fund..	Contingent Fund .....	Road Fund.....	Poor Fund .....	Bridge Fund....	Incidental Fund .....	Refund orders County Fund .....	Bond, Interest and Sinking Fund .....	Bonds, 6 Per Cent...	Total.....
Gross Indebtedness December 1, 1898, (being all unpaid Warrants and Bonds and accrued interest on the same) .....	\$28,849 89	\$2 00	\$31,530 58	\$4 00	\$2,225 53	.....	.....	.....	\$100,000 00	\$162,611 70
Warrants issued during fiscal year ending Nov. 30, 1899 .....	18,331 11	21,878 55	9,155 76	3,271 00	8,457 78	448 89	294 87	.....	.....	61,837 96
Bond and Warrant interest accruing year ending Nov. 30, 1899 .....	2,285 97	.....	1,526 14	.....	51 87	.....	.....	6,000 00	.....	9,863 98
Total .....	\$49,466 97	\$21,880 55	\$42,212 48	\$3,275 00	\$10,734 88	\$448 89	\$294 87	\$6,000 00	\$100,000 00	\$234,313 64
Warrants paid and cancelled during fiscal year ending Nov. 30, 1899 .....	39,237 77	21,880 55	6,921 52	3,275 00	2,378 55	438 29	232 87	.....	.....	75,024 55
Bond and Warrant interest paid during fiscal year ending Nov. 30, 1899 .....	2,285 97	.....	1,526 14	.....	51 87	.....	.....	5,850 00	.....	9,713 98
Total .....	\$41,523 74	\$21,880 55	\$8,447 66	\$3,275 00	\$3,030 42	\$438 29	\$232 87	\$5,850 00	.....	\$84,738 53
Gross debt Nov. 30, 1899 .....	7,943 23	.....	33,764 82	.....	7,704 46	10 60	2 00	150 00	100,000 00	149,575 11
Money in Treasury on Nov. 30, 1899 .....	32,643 25	9,607 47	6,825 58	5,103 59	3,789 91	144 75	.....	6,864 67	.....	64,979 22
Net balance Nov. 30, 1899 .....	\$24,700 02	\$9,607 47	\$26,939 24	\$5,103 59	\$3,914 55	\$3134 15	\$2 00	\$6,714 67	\$100,000 00	\$84,595 89
Net balance at end of previous fiscal year .....	3,832 51	\$9,764 43	26,994 23	\$5,015 24	83 38	\$33 04	.....	\$4,052 49	100,000 00	112,044 92
Decrease in net indebtedness .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	\$27,449 03

\* Denote credits.



## FERGUS COUNTY.

	General Fund..	Contingent Fund .....	Road Fund.....	Poor Fund .....	County High School Fund .....	Institute Fund .....	Bond, Interest and Sinking Fund .....	Bonds, 6 Per Cent...	Total.....
Gross indebtedness December 1, 1898, (being all unpaid Warrants and Bonds and accrued interest on the same) .....	\$130 14	\$212 45	\$5,746 57	\$12 00	.....	.....	\$2,575 00	\$103,000 00	\$111,676 16
Warrants issued during fiscal year ending Nov. 30, 1899 .....	21,650 85	18,065 16	20,037 77	6,200 25	.....	69 00	.....	.....	66,023 13
Bond and Warrant interest accruing year ending Nov. 30, 1899 .....	.....	.....	17 31	.....	.....	.....	6,060 90	.....	6,078 21
Total .....	\$21,780 99	\$18,277 61	\$25,801 65	\$6,214 25	.....	\$69 00	\$8,635 90	\$103,000 00	\$183,777 40
Warrants paid and cancelled during fiscal year ending Nov. 30, 1899 .....	21,764 44	18,135 11	25,513 58	6,171 85	.....	69 00	.....	.....	71,653 98
Bond and Warrant interest paid during fiscal year ending Nov. 30, 1899 .....	.....	.....	179 61	.....	.....	.....	6,060 90	.....	6,240 51
Total .....	\$21,764 44	\$18,135 11	\$25,693 19	\$6,171 85	.....	\$69 00	\$8,600 90	.....	\$77,894 43
Gross debt Nov. 30, 1899 .....	16 55	142 50	108 46	40 40	.....	.....	2,575 00	103,000 00	105,882 91
Money in Treasury on Nov. 30, 1899 .....	27,495 71	23,010 08	10,153 76	7,803 16	2,294 77	8 00	7,676 72	.....	78,442 20
Net balance Nov. 30, 1899 .....	\$27,479 16	\$22,867 58	\$10,045 30	\$7,762 76	\$2,294 77	\$8 00	\$5,101 72	\$103,000 00	\$27,440 71
Net balance at end of previous fiscal year .....	\$18,165 01	\$7,758 50	1,942 77	6,317 86	.....	\$14,688 00	\$313 70	\$2,800 77	\$103,359 90
Decrease in net indebtedness .....	.....	.....	.....	.....	.....	.....	.....	.....	\$44,803 71

\* Denote credits.

## GRANITE COUNTY.

	General Fund..	Contingent Fund .....	Road Fund.....	Poor Fund .....	Bridge Fund.	Total.....
Gross indebtedness December 1, 1898, (being all unpaid Warrants and accrued interest on the same).....	\$97,678 95	\$2,098 03	\$2,371 78	\$880 22	.....	\$113,028 98
Warrants issued during fiscal year ending Nov. 30, 1899 .....	12,063 80	18,283 34	11,057 73	4,294 58	4,665 00	50,364 25
Warrant interest accruing year ending Nov. 30, 1899 ..	7,000 00	.....	886 47	20 00	263 53	8,170 00
Total .....	\$116,742 55	\$20,381 37	\$24,315 98	\$5,194 80	\$4,928 53	\$171,563 23
Warrants paid and cancelled during fiscal year ending Nov. 30, 1899 .....	12,367 50	21,472 60	4,673 39	4,007 41	.....	42,520 90
Warrant interest paid during fiscal year ending Nov. 30, 1899 ..	4,263 29	36 69	2322 36	44 92	.....	4,672 26
Total .....	\$16,635 79	\$21,509 29	\$4,995 75	\$4,052 33	.....	\$47,193 16
Gross debt Nov. 30, 1899 .....	100,105 76	*1,127 92	19,320 23	1,142 47	4,928 53	124,370 07
Money in Treasury on Nov. 30, 1899 .....	5,028 17	8,383 90	4,631 63	828 71	2,127 76	21,010 17
Net balance Nov. 30, 1899 .....	\$95,078 59	*\$9,521 82	\$14,688 00	\$313 76	\$2,800 77	\$103,359 90
Net balances at end of previous year.....	93,156 03	*\$29 46	11,309 77	555 18	*\$0 00	104,641 52
Decrease in Net Indebtedness .....	.....	.....	.....	.....	.....	\$1,281 62

\* Denote credits.

## GALLATIN COUNTY.

	General Fund..	Contingent Fund .....	Road Fund.....	Poor Fund .....	Bridge Fund....	Bond, Interest and Sinking Fund .....	Bonds, 6 Per Cent...	Bonds, 4½ Per Cent..	Total.....
Gross Indebtedness December 1, 1898, (being all unpaid Warrants and Bonds and accrued interest on the same) .....	\$229 81	\$33,304 71	\$80,021 09	\$6 10	\$32,476 34		\$95,000 00		\$221,538 05
Warrants issued during fiscal year ending Nov. 30, 1899 .....	19,684 55	21,838 58	12,896 50	4,346 03	7,079 99				65,845 65
Bonds issued during fiscal year ending Nov. 30, 1899 .....								137,000 00	137,000 00
Bond and Warrant interest accruing year ending Nov. 30, 1899 .....	66	3,475 23	9,963 38		6,064 69	5,714 24			25,218 20
Total .....	\$19,915 02	\$59,113 52	\$82,880 97	\$4,352 13	\$45,621 02	\$5,714 24	\$95,000 00	\$137,000 00	\$449,601 90
Warrants paid and cancelled during fiscal year ending Nov. 30, 1899 .....	19,707 73	54,951 66	68,764 08	4,246 63	39,550 13				187,320 23
Bond and Warrant interest paid during fiscal year ending Nov. 30, 1899 .....	66	3,475 23	9,963 38		6,064 69	5,714 24			25,218 20
Total .....	\$19,708 39	\$58,426 89	\$78,727 46	\$4,346 63	\$45,614 82	\$5,714 24			\$212,538 43
Gross debt Nov. 30, 1899 .....	206 63	691 63	4,153 51	5 50	6 20		95,000 00	137,000 00	237,063 47
Money in Treasury on Nov. 30, 1899 .....	31,633 07	17,348 58	16,681 95	3,196 18	6,783 28	14,143 35			89,786 41
Net balance Nov. 30, 1899 .....	\$31,426 44	\$16,656 95	\$12,528 44	\$3,190 68	\$6,777 08	\$14,143 35	\$95,000 00	\$137,000 00	\$147,277 05
Net balance at end of previous fiscal year .....		\$11,093 02	\$2,442 31	\$3,430 71	\$2,731 60	\$6,377 74	95,000 00		178,960 02
Decrease in net indebtedness .....									\$31,682 96

\* Denote credits.



## SEVENTH ANNUAL REPORT OF BUREAU

## JEFFERSON COUNTY.

	General Fund..	Contingent Fund .....	Road Fund.....	Poor Fund .....	Bridge Fund....	Broadwater County Fund.....	Bond, Interest and Sinking Fund .....	Bonds, 6 Per Cent...	Bonds, 4½ Per Cent.....	Total.....
Gross Indebtedness December 1, 1898, (being all unpaid Warrants and Bonds and accrued interest on the same) .....										
Warrants issued during fiscal year ending Nov. 30, 1899 .....	\$50 90	\$1,282 45	\$309 35	\$25 50				\$150,000 00		\$151,668 20
Bonds issued during fiscal year ending Nov. 30, 1899 .....	9,576 47	18,090 58	13,529 42	4,277 80		832 41				46,306 68
Bond and Warrant interest accruing year ending Nov. 30, 1899 .....							7,251 76			75,000 00
Total .....	\$9,627 37	\$19,373 03	\$13,838 77	\$4,264 30		\$832 41	\$7,251 76	\$150,000 00	\$75,000 00	\$280,226 64
Warrants paid and cancelled during fiscal year ending Nov. 30, 1899 .....										
Bonds paid during fiscal year ending Nov. 30, 1899 .....	9,604 87	19,373 03	13,533 97	4,264 30		832 41				47,608 58
Bond and Warrant interest paid during fiscal year ending Nov. 30, 1899 .....							7,251 76	90,000 00		90,000 00
Total .....	\$9,604 87	\$19,373 03	\$13,533 97	\$4,264 30		\$832 41	\$7,251 76	\$90,000 00		\$144,860 34
Gross debt Nov. 30, 1899 .....	22 50		304 80	39 00						135,365 30
Money in Treasury on Nov. 30, 1899 .....	13,212 99	17,081 71	8,107 43	1,457 55	3,421 82		386 37			43,667 37
Net balance Nov. 30, 1899 .....	*13,190 49	*17,081 71	*87,802 63	*1,418 55	*\$3,421 82		*\$386 37	\$90,000 00	\$75,000 00	\$91,698 93
Net balance at end of previous fiscal year .....	*10,668 32	*15,001 08	*7,908 83	*\$840 41	*1,916 52		*\$3,138 13	150,000 00		110,526 71
Decrease in net indebtedness .....										\$18,827 78

\* Donate credits.

## LEWIS AND CLARKE COUNTY.

	General Fund..	Contingent Fund .....	Road and Bridge Fund.	Poor Fund .....	Bond, Interest and Sinking Fund .....	Bonds, 5½ Per Cent..	Total.....
Gross Indebtedness December 1, 1898, (being all unpaid Warrants and Bonds and accrued interest on the same) .....	\$20,407 76	\$8,709 56	\$6,341 31	\$8,886 98	\$5,225 00	\$190,000 00	\$239,570 61
Bonds issued during fiscal year ending Nov. 30, 1899 .....	47,654 16	53,307 75	15,090 13	31,602 07	.....	.....	147,654 11
Bond and Warrant interest accruing year ending Nov. 30, 1899 .....	608 38	443 12	56 55	290 59	10,450 00	.....	11,848 64
Total .....	\$68,670 30	\$62,460 43	\$21,487 99	\$40,779 64	\$15,675 00	\$190,000 00	\$399,073 35
Warrants paid and cancelled during fiscal year ending Nov. 30, 1899 .....	58,681 81	52,000 89	12,877 11	34,339 35	.....	.....	157,899 16
Bond and Warrant interest paid during fiscal year ending Nov. 30, 1899 .....	608 38	443 12	56 55	290 59	10,450 00	.....	11,848 64
Total .....	\$59,290 19	\$52,444 01	\$12,933 66	\$34,629 94	\$8,225 00	.....	\$169,747 80
Gross debt Nov. 30, 1899 .....	9,380 11	10,016 42	8,554 33	6,149 70	5,225 00	190,000 00	229,325 56
Money in Treasury on Nov. 30, 1899 .....	55,954 47	5 25	17,055 72	21,375 72	.....	.....	94,391 16
Net balance Nov. 30, 1899 .....	*\$46,574 36	\$10,011 17	*\$8,501 39	*\$15,226 02	\$5,225 00	\$190,000 00	\$134,934 40
Net balance at end of previous fiscal year .....	*18,009 46	4,701 59	5,234 53	10,549 80	5,225 00	190,000 00	197,101 46
Decrease in net indebtedness .....	.....	.....	.....	.....	.....	.....	\$62,167 05

\* Denote credits.

## SEVENTH ANNUAL REPORT OF BUREAU

## MADISON COUNTY.

	General Fund..	Contingent Fund .....	Road Fund.....	Poor Fund .....	Bridge Fund.	Bond, Interest and Sinking Fund .....	Bonds, 5½ Per Cent..	Total.....
Gross Indebtedness Dec. 1, 1898, (being all unpaid Warrants and Bonds and accrued interest on the same).....	\$231 27	\$3,054 80	\$34 75	\$17 20	.....	\$2,291 67	\$100,000 00	\$105,629 69
Warrants issued during fiscal year ending Nov. 30, 1899 .....	9,199 20	19,378 31	12,773 88	7,135 54	4,917 00	.....	.....	63,403 93
Bond and Warrant interest accruing year ending Nov. 30, 1899 .....	.....	12 95	.....	.....	.....	5,500 00	.....	5,512 95
Total .....	\$9,430 47	\$22,446 06	\$12,808 63	\$7,152 74	\$4,917 00	\$7,791 67	\$100,000 00	\$164,546 57
Warrants paid and cancelled during fiscal year ending Nov. 30, 1899 .....	9,160 95	22,316 17	12,708 63	7,118 39	4,917 00	.....	.....	56,221 14
Bond and Warrant interest paid during fiscal year ending Nov. 30, 1899 .....	.....	128 09	.....	.....	.....	5,500 00	.....	5,628 09
Total .....	\$9,160 95	\$22,444 26	\$12,708 63	\$7,118 39	\$4,917 00	\$5,500 00	.....	\$61,849 23
Gross debt Nov. 30, 1899 .....	269 52	1 80	100 00	34 35	.....	2,291 67	100,000 00	102,697 34
Money in Treasury on Nov. 30, 1899 .....	12,618 98	10,291 30	9,227 80	3,175 95	3,831 18	.....	.....	39,144 61
Net balance Nov. 30, 1899 .....	*\$12,349 46	*\$10,289 50	*\$9,127 80	*\$3,141 00	*\$3,831 18	\$2,291 67	\$100,000 00	\$83,552 73
Net balance at end of previous fiscal year .....	*9,764 38	*5,818 35	*3,591 93	*7,228 59	*106 83	2,291 67	100,000 00	76,781 49
Decrease in net indebtedness .....	.....	.....	.....	.....	.....	.....	.....	\$12,228 76

\* Denote credits.



## MEAGHER COUNTY.

	General Fund..	Contingent Fund .....	Road Fund.....	Poor Fund .....	Bridge Fund....	Institute Fund .....	Bond, Interest and Sinking Fund .....	Bonds, 6 Per Cent...	Bonds, 7 Per Cent....	Total.....
Gross Indebtedness December 1, 1898, (being all unpaid Warrants and Bonds and accrued interest on the same) .....	66 50	.....	41 00	3 14	528 84	.....	\$5,985 53	\$138,000 00	\$50,000 00	\$194,625 01
Warrants issued during fiscal year ending Nov. 30, 1899 .....	7,180 40	15,356 55	4,131 01	1,903 97	1,218 63	58 50	.....	.....	.....	29,848 80
Bond and Warrant interest accruing year ending Nov. 30, 1899 .....	.....	.....	.....	.....	.....	.....	11,780 00	.....	.....	11,780 00
Total .....	\$7,246 64	\$15,356 55	\$4,172 01	\$1,907 11	\$1,747 47	\$58 50	\$17,765 53	\$138,000 00	\$50,000 00	\$236,253 81
Warrants paid and cancelled during fiscal year ending Nov. 30, 1899 .....	7,126 84	15,356 55	4,104 04	1,905 93	1,747 47	58 50	.....	.....	.....	30,299 33
Bond and Warrant interest paid during fiscal year ending Nov. 30, 1899 .....	.....	.....	.....	.....	.....	.....	12,857 20	.....	.....	12,857 20
Total .....	\$7,126 84	\$15,356 55	\$4,104 04	\$1,905 93	\$1,747 47	\$58 50	\$12,857 20	.....	.....	\$43,156 53
Gross debt Nov. 30, 1899 .....	119 80	.....	67 97	1 18	.....	.....	4,908 33	138,000 00	50,000 00	193,097 28
Money in Treasury on Nov. 30, 1899 .....	33,302 80	3,069 23	3,506 79	4,331 20	3,104 86	78 50	54,253 96	.....	.....	101,687 34
Net balance Nov. 30, 1899 .....	*33,183 00	*\$3,069 23	*\$3,438 82	*\$4,330 02	*\$3,104 86	*\$78 50	*\$49,345 63	*\$138,000 00	*\$50,000 00	*\$91,409 94
Net balance at end of previous fiscal year .....	*27,224 00	*1,336 92	*5,149 02	*4,434 03	*1,178 42	*27 00	*\$36,599 26	138,000 00	50,000 00	112,051 35
Decrease in net indebtedness .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	*\$20,641 41

\* Denote credits.

## SEVENTH ANNUAL REPORT OF BUREAU

## MISSOULA COUNTY.

	General Fund..	Contingent Fund .....	Road Fund.....	Poor Fund .....	Taxes, etc Fund not Distributed...	Sinking Fund..	Bond and Interest Fund	Bonds, 6 Per Cent....	Bonds, 7 Per Cent....	Bonds, 5 Per Cent...	Total.....
Gross indebtedness Dec. 1, 1898, (being all unpaid Warrants and Bonds accrued interest on same) .....	\$82,799 30	\$69,275 42	\$15,686 27	\$82 35				\$190,000 00	\$63,000 00	\$4,350 00	\$425,203 34
Warrants issued during fiscal year ending Nov. 30, 1899.....	17,520 41	31,613 82	10,511 60	7,238 42							66,884 25
Bond and Warrant interest accruing year ending Nov. 30, 1899 .....	6,231 79	3,628 05	831 33	36 71			16,022 50				26,750 38
Total ... ..	\$106,551 50	104,517 29	\$27,039 20	\$7,357 48			16,022 50	\$190,000 00	\$63,000 00	\$4,350 00	\$518,837 97
Warrants paid and cancelled during fiscal year ending Nov. 30, 1899.....	28,513 18	27,508 95	11,893 30	4,871 45							72,786 88
Bond and Warrant interest paid during fiscal year ending Nov. 30, 1899.....	6,231 79	3,628 05	831 33	36 71			16,022 50				26,750 38
Total .....	\$34,744 97	\$31,137 00	\$12,724 63	\$4,908 16			16,022 50				\$99,537 26
Gross debt Nov. 30, 1899 .....	71,806 53	73,380 29	14,314 57	2,449 82				190,000 00	63,000 00	4,350 00	419,300 71
Money in Treasury on Nov. 30, 1899 .....	25,033 20	31,651 05	10,865 08	3,561 89	5,737 20	24,468 59	5,889 47				107,203 48
Net balance Nov. 30, 1899 .....	\$46,773 33	\$41,729 24	\$3,449 49	\$1,112 57	\$5,737 20	\$24,468 59	\$5,889 47	\$190,000 00	\$63,000 00	\$4,350 00	\$312,091 22
Net balance at end of previous fiscal year .....	67,879 87	54,378 27	10,369 05	\$26 71	\$6,850 61	\$10,215 12	\$3,558 10	190,000 00	63,000 00	4,350 00	369,026 65
Decrease in net indebtedness .....											\$56,932 42

\* Denote credits.

## PARK COUNTY.

	General Fund..	Contingent Fund .....	Road Fund.....	Poor Fund .....	Sinking Fund..	Bond, Interest and Sinking Fund .....	Bonds, 7 Per Cent....	Bonds, 6 Per Cent....	Total.....
Gross Indebtedness December 1, 1898, (being all unpaid Warrants and Bonds and accrued interest on the same) .....	\$65 30	\$17 20	\$23 25	\$20 73	.....	.....	\$120,000 00	\$80,000 00	\$200,126 43
Warrants issued during fiscal year ending (Nov. 30, 1899) .....	17,397 10	17,142 03	8,701 95	4,341 43	.....	.....	.....	.....	47,582 51
Bond and Warrant interest accruing year ending Nov. 30, 1899 .....	.....	.....	.....	.....	.....	12,800 00	.....	.....	12,800 00
Total .....	\$17,462 40	\$17,159 23	\$8,725 20	\$4,362 16	.....	\$12,800 00	\$120,000 00	\$80,000 00	\$260,508 99
Warrants paid and cancelled during fiscal year ending Nov. 30, 1899 .....	17,442 40	17,159 23	8,708 60	4,362 16	.....	.....	.....	.....	47,672 39
Bond and Warrant interest paid during fiscal year ending Nov. 30, 1899 .....	.....	.....	.....	.....	.....	12,800 00	.....	.....	12,800 00
Total .....	\$17,442 40	\$17,159 23	\$8,708 60	\$4,362 16	.....	\$12,800 00	.....	.....	\$60,472 39
Gross debt Nov. 30, 1899 .....	20 00	.....	16 60	.....	.....	.....	120,000 00	80,000 00	200,036 60
Money in Treasury on Nov. 30, 1899 .....	3,040 40	8,531 33	5,674 26	3,118 57	1,643 78	13,253 19	.....	.....	35,261 53
Net balance Nov. 30, 1899 .....	*\$2,020 40	*\$8,531 33	*\$5,657 66	*\$3,118 57	*\$1,643 78	*\$13,253 19	\$120,000 00	\$80,000 00	164,775 07
Net balance at end of previous fiscal year .....	*2,634 37	*5,002 03	*4,520 09	*2,064 93	*1,139 77	*9,113 39	120,000 00	80,000 00	175,535 42
Decrease in net indebtedness .....	.....	.....	.....	.....	.....	.....	.....	.....	\$10,760 35

\* Denote credits.



## RAVALLI COUNTY.

	General Fund..	Contingent Fund .....	Road Fund.....	Poor Fund .....	Bond, Interest and Sinking Fund .....	Bonds, 6 Per Cent..	Total.....
Gross Indebtedness December 1, 1898, (being all unpaid Warrants and Bonds and accrued interest on the same) .....	\$9,882 26	\$7,457 35	\$18,330 75	\$4,169 33	.....	\$75,000 00	\$114,439 69
Warrants issued during fiscal year ending Nov. 30, 1899 .....	17,649 23	17,114 59	15,329 16	3,006 75	.....	.....	53,099 73
Bond and Warrant interest accruing year ending Nov. 30, 1899 .....	499 55	424 92	1,014 55	106 09	4,500 00	.....	6,545 11
Total .....	\$28,031 04	\$24,996 86	\$34,674 46	\$7,282 17	\$4,500 00	\$75,000 00	\$174,084 53
Warrants paid and cancelled during fiscal year ending Nov. 30, 1899 .....	10,785 21	16,322 53	7,798 11	1,884 39	.....	.....	36,740 39
Bond and Warrant interest paid during fiscal year ending Nov. 30, 1899 .....	499 55	424 92	1,014 55	106 09	4,500 00	.....	6,545 11
Total .....	\$11,284 76	\$16,747 51	\$8,812 66	\$1,940 48	\$4,500 00	.....	\$43,285 41
Gross debt Nov. 30, 1899 .....	16,746 28	7,849 35	26,861 80	6,341 68	.....	75,000 00	130,799 12
Money in Treasury on Nov. 30, 1899 .....	19,313 16	12,300 17	9,273 66	3,185 75	8,533 25	.....	52,606 03
Net balance Nov. 30, 1899 .....	*\$2,566 88	*\$4,450 82	\$16,588 14	\$2,155 90	*\$8,533 25	\$75,000 00	\$78,193 09
Net balance at end of previous fiscal year .....	3,154 67	511 36	13,960 44	3,113 35	*4,162 02	75,000 00	91,577 20
Decrease in net indebtedness .....	.....	.....	.....	.....	.....	.....	\$13,384 11

\* Denote credits.

## SWEET GRASS COUNTY.

	General Fund..	Contingent Fund .....	Road Fund.....	Poor Fund .....	Bond, Interest and Sinking Fund .....	Bonds, 6 Per Cent....	Total.....
Gross Indebtedness December 1, 1898, (being all unpaid Warrants and Bonds and accrued interest on the same) .....	\$371 53	.....	\$236 50	.....	\$2,375 00	\$95,000 00	\$97,983 03
Warrants issued during fiscal year ending Nov. 30, 1899 .....	8,974 18	10,265 59	5,938 79	1,407 40	.....	.....	26,585 96
Warrant interest accruing year ending Nov. 30, 1899 .....	.....	.....	.....	.....	5,700 00	.....	5,700 00
Total .....	\$9,345 71	\$10,265 59	\$6,175 29	\$1,407 40	\$8,075 00	\$95,000 00	\$130,268 99
Warrants paid and cancelled during fiscal year ending Nov. 30, 1899 .....	9,294 69	10,265 59	6,157 91	1,405 40	.....	.....	27,123 59
Bond and Warrant interest paid during fiscal year ending Nov. 30, 1899 .....	1 50	.....	38	.....	5,700 00	.....	5,701 88
Total .....	\$9,296 19	\$10,265 59	\$6,158 29	\$1,405 40	\$5,700 00	.....	\$32,825 47
Gross debt Nov. 30, 1899 .....	49 52	.....	17 00	2 00	2,375 00	95,000 00	97,443 52
Money in Treasury on Nov. 30, 1899 .....	12,335 76	9,639 05	5,202 19	1,978 37	6,502 70	.....	35,658 07
Net balance Nov. 30, 1899 .....	*\$12,286 24	*\$9,639 05	*\$5,185 19	*\$1,976 37	*\$4,127 70	\$95,000 00	\$61,785 45
Net balance at end of previous fiscal year .....	*7,426 56	*5,582 08	*2,051 14	*691 77	*1,905 06	95,000 00	77,342 79
Decrease in net indebtedness .....	.....	.....	.....	.....	.....	.....	\$15,557 34

\* Denote credits.

## SILVER BOW COUNTY.

	General Fund..	Contingent Fund .....	Road Fund.....	Poor Fund .....	Bond, Interest and Sinking Fund .....	Bonds, 5 Per Cent....	Total .....
Gross Indebtedness Dec. 1, 1898, (being all unpaid Warrants and Bonds and accrued interest on the same) .....							
Warrants issued during fiscal year ending Nov. 30, 1899 .....	\$1,024 92	\$78 79	\$8 39	\$252 06		\$125,000 00	\$126,364 16
Bond and Warrant interest accruing year ending Nov. 30, 1899 .....	98,523 72	113,614 49	34,227 56	47,944 87			299,310 64
Total .....	\$99,548 64	\$113,693 28	\$34,235 95	\$48,196 93	\$6,250 00		6,250 00
Warrants paid and cancelled during fiscal year ending Nov. 30, 1899 .....						\$125,000 00	\$431,924 80
Bond and Warrant interest paid during fiscal year ending Nov. 30, 1899 .....	97,654 25	118,563 24	34,147 95	47,796 81			298,162 25
Total .....	\$97,654 25	\$118,563 24	\$34,147 95	\$47,796 81	\$6,250 00		6,250 00
Gross debt Nov. 30, 1899 .....	1,894 39	130 04	88 00	400 12			\$304,412 25
Money in Treasury on Nov. 30, 1899 .....	150,719 49	3,248 34	15,343 76	40,293 82		125,000 00	127,512 55
Net balance Nov. 30, 1899 .....	*148,825 10	*33,118 30	*\$15,255 76	*\$39,893 70		125,000 00	255,478 65
Net balance at end of previous fiscal year .....	*30,089 65	*15,205 74	*10,103 38	*\$1,806 17			*\$127,966 10
Decrease in net indebtedness .....							6,359 02
							\$121,607 08

\* Denote credits.



## TEON COUNTY

	General Fund..	Contingent Fund .....	Road Fund.....	Poor Fund .....	Bridge Fund....	Institute Fund .....	Bond, Interest and Sinking Fund.....	Bonds, 6 Per Cent....	Total.....
Gross indebtedness Dec. 1, 1898, (being all unpaid Warrants and Bonds and accrued interest on the same).....	\$2,540 32	\$867 24	\$70 50	\$30 00	.....	.....	\$1,500 00	\$60,000 00	\$65,008 06
Warrants issued during fiscal year ending Nov. 30, 1899 .....	19,642 98	11,818 65	6,941 65	1,886 79	9,475 00	52 70	.....	.....	49,767 77
Bond and Warrant interest accruing year ending Nov. 30, 1899 .....	26 24	96	.....	.....	.....	.....	3,609 00	.....	3,636 20
Total .....	\$22,209 54	\$12,688 85	\$7,012 15	\$1,866 79	\$9,475 00	\$52 70	\$5,109 00	\$60,000 00	\$118,412 03
Warrants paid and cancelled during fiscal year ending Nov. 30, 1899 .....	14,948 90	8,579 28	6,081 14	1,865 14	1,380 99	52 70	.....	.....	32,908 15
Bond and Warrant interest paid during fiscal year ending Nov. 30, 1899 .....	26 24	96	.....	.....	.....	.....	3,609 00	.....	3,636 20
Total .....	\$14,975 14	\$8,580 24	\$6,081 14	\$1,865 14	\$1,380 99	\$52 70	\$3,609 00	.....	\$36,544 34
Gross debt Nov. 30, 1899 .....	7,234 40	4,106 61	931 01	1 65	8,094 01	.....	1,500 00	60,000 00	81,867 68
Money in Treasury on Nov. 30, 1899 .....	14,994 03	5,414 92	5,593 80	1,884 63	2,622 14	8 00	3,751 68	60,000 00	34,199 20
Net balance Nov. 30, 1899 .....	\$7,759 63	\$1,308 31	\$4,592 70	\$1,882 98	\$5,471 87	\$8 00	\$2,251 68	.....	\$47,668 48
Net balance at end of previous fiscal year .....	\$5,838 32	\$1,678 73	\$3,407 89	\$819 71	\$552 64	\$8 00	\$1,133 47	.....	46,261 24
Increase in net indebtedness .....	.....	.....	.....	.....	.....	.....	.....	.....	\$1,407 24

\* Denote credits.

## VALLEY COUNTY.

	General Fund..	Contingent Fund .....	Road Fund.....	Poor Fund .....	Bridge Fund.	Bond, Interest and Sinking Fund.....	Bonds, 7 Per Cent...	Total.....
Gross Indebtedness Dec. 1, 1898, (being all unpaid Warrants and Bonds and accrued interest on the same).....	\$7,875 15	\$12,166 36		\$6 00			\$67,000 00	\$87,047 51
Warrants issued during fiscal year ending Nov. 30, 1899 .....	11,649 43	10,821 90	2,062 14	2,647 90	11,785 25			38,966 62
Bond and Warrant interest accruing year ending Nov. 30, 1899 .....	602 30	1,083 32	5 51	22 49	89 35	4,690 00		6,492 97
Total .....	\$20,126 88	\$24,071 58	\$2,067 65	\$2,676 39	\$11,874 60	\$4,690 00	\$67,000 00	\$132,507 10
Warrants paid and cancelled during fiscal year ending Nov. 30, 1899 .....	17,296 98	20,128 02	2,051 14	2,632 90	6,897 00			49,006 01
Bond and Warrant interest paid during fiscal year ending Nov. 30, 1899 .....	602 30	1,083 32	5 51	22 49	89 35	4,690 00		6,492 97
Total .....	\$17,899 28	\$21,211 34	\$2,056 65	\$2,655 39	\$6,986 35	\$4,690 00		\$55,499 01
Gross debt Nov. 30, 1899 .....	2,227 60	2,860 24	11 00	21 00	4,888 25		67,000 00	77,008 09
Money in Treasury on Nov. 30, 1899 .....	4,834 25	1,250 21	3,549 69	2,305 39	93 87	5,194 73		17,228 14
Net balance Nov. 30, 1899 .....	*\$2,006 65	\$1,610 03	*\$3,538 69	*\$2,284 39	\$4,794 38	*\$5,194 73	\$67,000 00	\$59,779 95
Net balance at end of previous fiscal year .....	5,072 19	9,506 77	*3,727 79	*2,355 80	*1,506 27	*3,769 26	67,000 00	70,221 84
Decrease in net indebtedness .....								\$10,441 89

\* Denote credits.

## YELLOWSTONE COUNTY.

	General Fund..	Contingent Fund .....	Road Fund.....	Poor Fund .....	Bridge Fund.	Bond, Interest and Sinking Fund.....	Bonds, 6 Per Cent....	Bonds, 5 Per Cent...	Total.....
Gross Indebtedness Dec. 1, 1898, (being all unpaid Warrants and Bonds and accrued interest on the same).....	\$24 85		\$4,055 00	\$75 00		\$4,061 50	\$59,000 00	\$91,500 00	\$158,717 01
Warrants issued during fiscal year ending Nov. 30, 1899 .....	17,690 57	20,835 60	12,605 92	4,856 57					65,027 66
Bond and Warrant interest accruing year ending Nov. 30, 1899 .....			149 03			8,120 72			8,269 75
Total .....	\$17,415 42	\$20,835 60	\$16,810 61	\$4,970 57		\$12,182 22	\$59,000 00	\$91,500 00	\$223,014 42
Warrants paid and cancelled during fiscal year ending Nov. 30, 1899 .....	17,692 92	20,835 60	16,652 58	4,958 82					60,139 92
Bond and Warrant interest paid during fiscal year ending Nov. 30, 1899 .....			149 03			8,120 72			8,269 75
Total .....	\$17,692 92	\$20,835 60	\$16,801 61	\$4,958 82		\$8,120 72			\$68,409 67
Gross debt Nov. 30, 1899 .....	22 50		9 00	11 75		4,061 50	59,000 00	91,500 00	154,604 75
Money in Treasury on Nov. 30, 1899 .....	20,100 94	13,154 18	7,271 06	3,803 33	51 36	18,010 90			62,391 77
Net balance Nov. 30, 1899 .....	*20,078 44	*13,154 18	*\$7,262 06	*\$3,791 58	*\$51 36	*\$13,949 40	\$59,000 00	\$91,500 00	\$92,212 98
Net balance at end of previous fiscal year .....	*18,116 40	*5,710 72	*450 52	*923 61	*33 76	*\$3,363 23	59,000 00	91,500 00	121,401 76
Decrease in net indebtedness .....									\$29,688 78

\* Denote credits.



## SEVENTH ANNUAL REPORT OF BUREAU

## RECAPITULATION.

Bonds and Warrants outstanding December 1st, 1898. . . . .	\$4,095,235 95	
Warrants issued during 1899 . . . . .	1,781,774 60	
Bonds issued during 1899 . . . . .	282,000 00	
Bonds and Warrant interest accruing during 1899 . . . . .	243,943 40	
		\$6,402,953 95

## CONTRA.

Warrants paid during 1899 . . . . .	\$1,885,921 99	
Bonds paid during 1899 . . . . .	110,000 00	
Band and Warrant interest paid during 1899 . . . . .	243,735 34	
Cash in Treasuries . . . . .	1,740,574 82	
Net indebtedness November 30th, 1899. . . . .	2,422,721 80	
		\$6,402,953 95

RECAPITULATION OF COUNTY RECEIPTS AND DISBURSEMENTS FOR  
YEAR ENDING NOVEMBER 30, 1899.

	Balance in fund Dec. 1, 1898	Received for credit during year	Total	Paid out and charg'd during year	Balance to credit of fund Nov. 30, 1899
General Fund . . . . .	\$ 347,246 50	\$1,354,536 87	\$1,701,783 37	\$ 941,104 50	\$ 760,678 87
Contingent Fund . . . . .	165,682 86	769,732 53	935,415 39	706,821 86	228,593 53
Road Fund . . . . .	103,288 10	459,496 83	562,784 93	355,886 42	206,898 51
Poor Fund . . . . .	98,556 27	277,665 19	376,221 46	216,960 94	159,260 52
Bridge Fund . . . . .	27,139 41	136,510 24	163,649 65	95,026 64	68,623 01
Sinking Fund . . . . .	122,683 25	216,296 62	338,979 81	139,473 63	199,506 18
Bond Fund. . . . .	46,599 35	131,119 02	177,718 37	87,994 11	89,724 26
General School Fund . . . . .	187,996 82	831,169 80	1,019,166 62	516,444 75	502,721 87
District School Fund . . . . .	284,163 91	952,426 01	1,236,589 92	946,805 76	289,784 16
City Fund. . . . .	76,085 92	369,331 55	445,417 47	288,994 19	156,423 28
State Fund . . . . .	164,834 21	648,901 60	813,735 81	485,418 46	328,317 35
State Bounty Fund . . . . .	11,553 98	68,464 73	80,018 71	49,426 14	30,592 57
Stock, Insp. & Det. Fund. . . . .	9,004 19	29,076 06	38,080 24	19,630 76	18,449 48
Stock Indemnity Fund. . . . .	2,061 48	4,833 53	6,895 01	4,525 02	2,369 99
Sheep Insp. & Ind. Fund. . . . .	2,029 23	4,926 13	6,955 36	3,836 37	3,118 99
State Stock Bounty Fund . . . . .	22,457 59	98,366 54	120,824 13	47,969 56	72,854 57
Dist. Court Clerk Deposit . . . . .	26,116 88	21,327 10	47,443 98	28,478 14	18,965 84
Estates Unsettled . . . . .	12,903 78	13,294 54	26,198 32	17,138 47	9,059 85
Institute Fund . . . . .	621 49	1,311 45	1,932 94	1,167 85	765 09
Miscellaneous Funds . . . . .	59,474 03	124,118 33	183,592 36	128,089 28	55,503 08
Total . . . . .	\$1,770,499 28	\$6,512,904 57	\$8,283,403 85	\$5,081,192 85	\$3,202,211 00
Total transferred . . . . .	\$1,770,499 28	\$984,637 18			
Cash . . . . .	\$1,770,499 28	\$528,267 39	\$7,298,766 67	\$4,096,555 67	\$3,202,211 00

## RECAPITULATION OF REVENUE RECEIPTS FOR YEAR ENDING NOVEMBER 30, 1899.

COUNTY.	Taxes, 1899.	Taxes, 1898, Not Delinquent.	Delinquent Taxes.	Penalty and Interest.	Licenses.	County Officers Fees.	Sale of County Bonds.	Sale of School District Bonds.	Other Sources.	TOTALS.
Beaverhead ..	\$75,616 49	\$28,913 68	\$1,270 50	\$119 96	\$14,181 50	\$3,023 45	\$20,000 00	.....	\$7,521 80	\$150,647 38
Broadwater ..	46,200 49	19,512 50	658 70	121 40	6,781 50	1,920 40	.....	\$8,375 00	4,417 01	87,987 00
Carbon ..	54,576 73	19,637 95	1,867 53	127 71	10,859 25	2,244 60	.....	15,400 00	9,453 74	114,172 51
Cascade ..	231,108 56	159,393 33	13,413 15	2,419 85	51,928 28	8,614 30	.....	.....	31,108 44	497,988 91
Choteau ..	140,619 46	47,641 72	13,416 15	2,419 85	51,928 28	8,614 30	.....	.....	7,036 93	217,751 83
Custer ..	164,145 91	77,898 85	7,833 62	975 01	14,075 32	2,849 79	.....	9,990 00	1,730 30	269,548 80
Dawson ..	66,596 23	21,106 46	1,224 91	219 23	3,514 00	976 05	.....	.....	1,697 49	95,334 37
Deer Lodge ..	193,466 84	88,038 72	13,093 94	1,773 49	46,007 50	6,832 89	50,948 32	.....	19,802 99	420,624 69
Fergus ..	110,202 21	49,441 05	9,179 87	1,304 46	14,437 47	4,413 61	.....	5,143 78	7,263 46	201,355 91
Flathead ..	100,442 85	42,016 61	5,500 06	1,352 83	17,164 00	4,446 93	.....	1,123 50	6,125 95	178,172 73
Gallatin ..	145,882 84	61,796 28	8,025 56	2,364 42	13,667 50	4,826 98	137,000 00	.....	20,626 01	394,189 59
Granite ..	51,388 52	26,948 92	5,196 23	966 04	14,344 34	1,985 83	.....	.....	4,628 46	105,458 34
Jefferson ..	63,490 69	21,196 32	10,445 39	1,422 20	13,501 00	5,741 39	.....	.....	4,312 81	120,169 77
Lewis and Clarke ..	243,417 92	125,843 65	16,462 37	3,972 02	54,760 95	12,004 19	.....	.....	41,863 80	498,324 90
Madison ..	71,475 97	29,140 88	1,369 32	282 29	14,782 50	5,055 24	.....	.....	4,096 73	126,212 93
Meagher ..	66,847 47	8,938 50	19,209 66	2,023 59	4,204 00	2,103 85	.....	13,056 00	3,973 41	119,356 49
Missoula ..	151,160 00	71,928 43	13,066 32	3,913 23	26,441 00	5,056 12	.....	.....	7,700 62	279,265 72
Park ..	87,423 55	32,310 34	2,140 20	432 83	13,448 50	4,087 11	.....	.....	6,150 69	145,993 22
Ravalli ..	67,290 23	27,080 02	3,395 55	1,695 60	7,889 75	3,928 77	.....	2,500 00	10,415 66	124,106 18
Silver Bow ..	469,001 21	207,106 80	17,764 81	2,334 49	144,305 75	23,027 05	.....	.....	70,009 16	933,549 27
Sweet Grass ..	54,093 84	16,289 05	1,720 59	221 23	3,618 00	3,966 03	.....	6,470 00	1,342 54	86,121 28
Teton ..	57,476 78	17,039 93	1,256 17	372 25	5,711 50	1,831 95	.....	.....	1,314 90	85,003 48
Teton ..	55,644 62	10,690 15	1,564 38	426 80	6,541 10	473 45	.....	.....	2,472 69	77,813 19
Valley ..	112,098 24	42,246 57	4,453 52	905 67	20,133 50	2,893 23	.....	8,250 00	8,052 17	199,088 90
Yellowstone ..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total ..	\$2,868,577 65	\$1,262,157 31	\$162,281 43	\$30,078 99	\$539,913 71	\$114,818 94	\$207,948 32	\$69,308 28	\$283,182 76	\$5,528,267 39

STATEMENT OF STATE AND COUNTY TAXES DELINQUENT FOR 1899, AND DELINQUENT TAXES FOR PRIOR  
YEARS REMAINING UNCOLLECTED NOVEMBER 30, 1899.

COUNTY.	State Tax		Stock Indemnity Tax		Stock Ins. and Detect.		Sheep Ins. and Ind. Tax	
	1899	Prior years	1899	Prior years	1899	Prior years	1899	Prior years
Beaverhead .....	\$217 01	\$230 45	\$0 52	\$0 57	\$12 09	\$10 68	.....	.....
Broadwater .....	133 50	94 79	1 46	1 77	12 81	9 92	.....	.....
Carbon* .....	300 77	.....	3 12	.....	33 47	.....	\$5 91	.....
Cascade* .....	1,601 35	.....	2 91	.....	30 56	.....	02	.....
Chouteau* .....	412 16	.....	4 68	.....	68 95	.....	16 97	.....
Custer .....	556 46	320 11	8 40	24 72	95 51	58 32	9 54	\$10 53
Dawson* .....	196 77	.....	22 93	.....	68 83	.....	7 10	.....
Deer Lodge .....	639 96	929 30	2 24	23 56	131 56	47 37	94	.....
Fergus .....	543 61	1,355 91	41 06	15 97	130 90	56 77	3 90	55
Flathead .....	658 38	1,139 59	6 80	21 67	75 71	26 64	.....	.....
Gallatin .....	433 34	3,098 66	5 57	13 22	32 04	8 10	.....	.....
Granite .....	416 24	743 37	8 65	5 02	11 96	8 90	.....	.....
Jefferson .....	987 10	3,629 14	6 90	8 05	101 35	57 24	.....	10
Lewis and Clarke .....	3,708 99	3,057 76	37 74	12 37	55 27	27 07	1 42	75
Madison .....	198 35	224 34	2 16	2 97	18 00	33 11	.....	.....
Meagher .....	342 03	1,117 90	1 10	5 16	14 24	124 53	5 63	62
Missoula .....	2,025 80	4,606 20	51 52	25 37	308 47	99 76	20	39
Park* .....	766 56	.....	.....	.....	60	.....	.....	.....
Ravalli .....	240 86	988 70	1 71	22 63	26 81	1 78	.....	2 39
Silver Bow .....	2,155 97	4,528 80	11 56	33 03	59 64	70 20	15	01
Sweet Grass .....	157 96	475 94	1 02	75	3 88	11 39	4 98	11 43
Teton .....	655 41	1,173 16	8 80	13 63	130 11	88 56	37 17	12 87
Valley .....	87 86	13 73	2 39	09	32 18	27	1 55	.....
Yellowstone* .....	549 04	.....	2 79	.....	21 91	.....	6 83	.....
Total .....	\$ 18,046 57	\$27,987 85	\$236 19	\$235 55	\$1,477 14	\$740 61	\$102 31	\$39 64

\* Totals only as to delinquent taxes for prior years.



## STATE AND COUNTY TAXES DELINQUENT CO NTINUED.

COUNTY.	Stock Bounty		County		All other Taxes		Totals		Grand Totals
	1899	Prior ye'ts	1899	Prior years	1899	Prior years	1899	Prior year	
Beaverhead .....	\$68 21	\$21 42	\$718 95	\$1,109 97	\$615 46	\$75 14	\$1,632 33	\$1,448 23	\$3,080 56
Broadwater .....	42 15	27 01	997 06	580 45	221 66	150 92	1,318 64	864 86	2,183 50
Carbon .....	197 93	.....	2,171 01	.....	1,408 75	.....	4,120 96	8,074 50	12,195 46
Cascade .....	192 97	.....	7,386 42	.....	833 75	.....	10,048 04	7,573 88	17,621 92
Choteau .....	400 95	.....	2,904 36	.....	670 82	.....	4,478 89	2,714 80	7,193 69
Custer .....	510 72	212 61	3,790 96	2,431 22	2,804 28	124 21	7,765 87	3,181 72	10,947 59
Dawson ..	300 36	.....	1,994 18	.....	218 00	.....	2,808 17	16,201 39	19,009 56
Deer Lodge ..	114 15	106 74	4,014 73	7,478 77	2,371 63	3,938 45	7,335 20	12,523 19	19,858 39
Fergus .....	481 85	68 50	3,678 35	9,871 65	803 21	1,434 56	5,682 88	13,003 91	18,686 79
Flathead .....	341 35	110 49	4,952 14	10,313 63	1,611 56	8,856 19	7,645 95	20,528 21	28,174 16
Gallatin .....	110 25	142 85	2,300 49	12,628 18	1,507 06	8,851 54	4,389 35	24,747 55	29,136 90
Granite .....	85 36	30 92	2,935 62	4,454 36	2,241 67	842 32	5,759 50	6,084 89	11,844 39
Jefferson .....	440 30	237 79	6,117 00	18,234 31	546 60	2,717 41	8,199 65	24,884 04	33,083 09
Lewis and Clarke ..	199 20	88 12	16,300 24	12,209 01	3,920 57	6,212 15	24,223 43	21,065 23	45,288 66
Madison .....	111 09	89 61	1,031 33	1,345 68	634 68	472 23	1,995 61	2,107 94	4,103 55
Meagher .....	103 06	75 86	2,048 77	8,319 50	968 35	673 51	3,183 18	10,317 08	13,500 26
Missoula .....	1,025 08	329 40	12,347 27	26,630 20	4,626 87	17,344 57	20,385 21	49,036 89	69,421 10
Park .....	.....	.....	3,245 85	.....	3,856 15	.....	7,869 16	5,353 64	13,422 80
Ravalli .....	88 99	155 69	1,927 37	11,063 54	609 34	1,565 99	2,896 08	13,790 72	16,686 80
Silver Bow .....	178 05	214 15	10,756 63	21,153 97	2,685 33	29,799 20	15,847 23	55,799 36	71,646 59
Sweet Grass .....	100 57	152 74	1,041 98	3,893 51	370 41	1,042 74	1,680 83	5,588 50	7,269 33
Teton .....	804 89	467 41	3,733 94	6,528 13	699 68	2,007 78	6,070 00	10,291 54	16,361 54
Valley .....	134 87	32	782 02	108 81	72 00	6 00	1,112 87	129 22	1,242 09
Yellowstone .....	229 78	2,997 09	.....	.....	3,228 37	.....	7,045 95	3,090 88	10,136 83
Total.....	\$6,263 13	\$2,528 63	\$100,133 76	\$158,344 89	\$37,236 37	\$86,114 91	\$163,404 38	\$319,201 17	\$482,695 55

## BONDS OUTSTANDING.

COUNTY.	County Bonds Outstanding	School District Bonds Outstanding	City Bonds Outstanding.	Total Bonds Outstanding.	Amount of Interest Paid Annually.
Beaverhead ... ..	\$80,000 00	\$12,000 00	.....	\$92,000 00	\$5,320 00
Broadwater . . . . .	62,000 00	13,100 00	.....	75,100 00	4,506 00
Carbon ... ..	57,000 00	20,400 00	.....	77,400 00	4,584 00
Cascade ... ..	361,719 19	184,000 00	525,000 00	1,070,719 19	62,000 91
Choteau ... ..	200,000 00	10,000 00	12,500 00	222,500 00	13,475 00
Custer ... ..	274,000 00	17,640 00	17,000 00	308,640 00	18,518 40
Dawson ... ..	100,000 00	3,000 00	.....	103,000 00	6,290 00
Deer Lodge ... ..	250,000 00	137,000 00	52,000 00	439,000 00	24,010 00
Fergus ... ..	103,000 00	28,500 00	.....	131,500 00	7,890 00
Flathead ... ..	100,000 00	38,800 00	20,000 00	158,800 00	9,603 00
Gallatin ... ..	232,000 00	78,600 00	203,000 00	513,600 00	27,231 00
Granite ... ..	.....	30,000 00	.....	30,000 00	1,800 00
Jefferson ... ..	135,000 00	21,000 00	.....	156,000 00	8,235 00
Lewis and Clarke...	190,000 00	278,550 00	516,000 00	984,550 00	52,388 00
Madison ... ..	100,000 00	5,400 00	7,500 00	112,900 00	6,359 00
Meagher ... ..	188,000 00	13,000 00	30,000 00	231,000 00	14,360 00
Missoula ... ..	257,350 00	60,900 00	93,000 00	411,250 00	25,711 50
Park ... ..	200,000 00	27,900 00	10,000 00	237,900 00	15,329 00
Ravalli ... ..	75,000 00	22,139 00	.....	97,139 00	5,853 84
Silver Bow ... ..	125,000 00	60,000 00	140,000 00	325,000 00	18,150 00
Sweet Grass ... ..	95,000 00	13,720 00	.....	108,720 00	6,603 20
Teton ... ..	60,000 00	11,000 00	.....	71,000 00	4,260 00
Valley ... ..	67,000 00	.....	.....	67,000 00	4,690 00
Yellowstone ... ..	150,500 00	22,500 00	25,000 00	198,000 00	10,928 00
Totals ... ..	\$3,462,569 19	\$1,109,149 00	\$1,651,000 00	\$6,222,718 19	.....
Annual Interest ...	\$202,283 41	\$66,762 44	\$89,050 00	.....	\$358,095 85
Average rate ... ..	.058	.0619	.0539	.....	.0575

## ITEMIZED STATEMENT OF COUNTY EXPENSES.

STATEMENT SHOWING BY COUNTIES THE AMOUNT PAID OUT ON ACCOUNT OF THE FOLLOWING CLASSIFIED EXPENSES FOR THE FISCAL YEAR ENDED NOVEMBER 30, 1898, AS REPORTED BY COUNTY CLERKS.

COUNTIES.	COURT EXPENSE.										
	Salary of Clerk of the District Court	Salary of the deputy Clerk of the District Court....	Salary of County Attorney and Assistants .....	Salary and mileage of Stenographer..	Salary of Sheriff..	Salaries of Deputy Sheriffs, Bailiffs, etc. ....	Expenses of Sheriff's office .....	Board of Prisoners	Jurors, fees, per diem and mileage	Witnesses fees, mileage and per diem .....	Contingent or miscellaneous court expense.....
Beaverhead	\$1,200 00	\$900 00	\$600 00	\$595 30	\$2,000 00	\$1,500 00	245 65	\$238 50	\$488 20	\$44 40	228 75
Broadwater	1,200 00	42 00	600 00	385 20	2,000 00	1,212 00	718 52	754 30	754 30	93 60	14 94
Carbon	1,200 00	55 00	677 63	421 60	1,800 00	1,183 32	1,261 98	397 30	397 30	288 70	77 80
Cascade	2,750 00	1,200 00	1,504 11	1,859 55	3,208 30	8,174 27	2,518 30	4,078 90	4,571 30	1,508 90	3,606 40
Choteau	1,800 00	200 00	750 00	750 00	2,250 00	2,160 00	2,518 30	2,231 70	3,247 70	3,606 40	1,000 00
Custer	2,000 00	.....	2,000 00	997 35	2,750 00	4,095 00	.....	1,618 93	6,330 90	5,721 10	6,756 64
Dawson	1,100 00	.....	458 27	65 02	1,650 00	856 23	.....	79 50	1,182 20	231 00	15 14
Deer Lodge	2,000 00	1,199 92	1,812 46	1,385 90	2,750 00	6,253 37	2,398 55	6,296 00	7,753 30	3,996 70	2,146 95
Fergus	1,800 00	141 00	750 00	980 29	2,250 00	2,743 00	1,250 01	493 03	1,768 90	739 90	718 03
Flathead	1,200 00	900 00	1,023 80	1,551 51	2,000 00	4,110 00	1,105 21	2,377 56	1,261 60	1,759 90	723 50
Gallatin	2,000 00	1,200 00	2,000 00	1,800 00	2,750 00	2,400 00	1,756 40	869 50	1,200 60	721 30	150 00
Granite	1,200 00	.....	600 00	462 94	2,000 00	.....	528 10	145 00	1,313 60	.....	.....
Jefferson	1,200 00	172 50	600 00	527 70	2,000 00	2,786 35	1,910 00	779 50	1,961 10	609 70	222 00
Lewis and Clarke	3,000 00	5,100 00	4,147 22	3,643 00	3,500 00	7,800 00	489 39	3,506 60	7,657 00	3,464 95	2,971 89
Madison	1,200 00	400 00	600 00	466 78	2,000 00	1,500 00	1,477 28	876 45	1,572 30	1,338 90	.....
Meagher	1,800 00	81 00	750 00	408 80	2,250 00	1,531 10	331 10	183 80	405 10	87 40	25 00
Missoula	2,000 02	1,200 00	949 95	1,201 20	2,749 93	5,359 65	3,155 15	3,107 60	2,831 00	1,000 80	1,069 10
Park	1,200 00	900 00	634 50	1,021 30	2,000 00	2,972 70	.....	1,271 50	2,314 00	1,108 00	.....
Ravalli	1,200 00	750 00	616 70	604 81	2,000 00	2,400 00	2,462 29	514 33	711 60	607 80	643 02
Silver Bow	3,500 00	6,000 00	5,605 60	3,600 00	4,500 00	9,200 00	6,706 50	14,148 05	26,635 60	7,707 30	.....
Sweet Grass	1,200 00	.....	1,000 00	373 50	1,800 00	633 51	124 00	660 10	689 55	208 60	54 15
Teton	1,200 00	.....	600 00	382 58	1,999 99	2,970 15	1,835 23	352 50	460 00	699 00	256 50
Valley	1,200 00	.....	500 00	187 50	1,800 00	3,120 00	1,290 15	433 50	2,024 40	2,259 30	.....
Yellowstone	1,215 00	100 00	600 00	842 71	3,896 42	.....	1,626 28	776 50	3,314 60	4,767 60	1,190 72
Total	\$29,365 02	\$20,541 42	\$29,380 24	\$24,504 54	\$57,904 64	\$74,960 68	\$33,433 64	\$46,187 65	\$79,746 45	\$42,571 25	\$18,264 11



## STATEMENT OF COUNTY EXPENSES 1898—Continued.

COUNTIES.	EXPENSES FOR JUSTICES' and CORONERS' COURTS						POOR FUND			
	Fees of Justices of the Peace .....	Fees of jurors .....	Fees of Witnesses.	Fees of Constables	Fees and expenses of Coroner .....	All other items of Justices' and Coroner's Courts .....	Acquiring and improving Poor Farm .....	Maintenance of Poor at Poor Farm .....	Aid of Poor other than at Poor Farm .....	Medical Attendance and medicines for County Poor .....
Beaverhead .....	\$73 00	\$25 50	.....	\$98 75	.....	.....	\$867 25	\$2,443 15	\$1,722 45	\$852 70
Broadwater .....	88 20	36 30	.....	63 75	5 50	.....	.....	1,000 00	126 83	795 00
Carbon .....	258 90	94 00	.....	208 05	91 25	57 80	.....	.....	460 80	225 00
Cascade .....	1,121 60	346 05	292 10	617 45	.....	.....	601 13	3,406 11	3,485 54	1,379 21
Choteau .....	966 09	148 50	.....	1,153 06	550 00	453 00	.....	.....	6,000 14	2,590 00
Custer .....	525 00	274 20	409 40	785 20	105 00	322 60	119 70	2,299 73	1,254 43	333 50
Dawson .....	32 50	31 50	1 50	12 50	22 30	25 00	.....	39 55	503 88	245 00
Deer Lodge .....	1,319 15	673 30	.....	2,455 05	335 90	918 50	.....	.....	16,664 75	1,685 00
Fergus .....	505 00	90 00	.....	164 05	91 05	.....	.....	2,307 93	1,556 20	455 30
Flathead .....	351 05	27 00	3 00	404 90	340 84	103 50	.....	1,367 49	2,347 63	695 00
Gallatin .....	366 70	208 05	.....	76 70	113 40	.....	.....	2,908 24	.....	.....
Granite .....	197 29	46 50	.....	210 80	.....	.....	.....	.....	2,859 41	.....
Jefferson .....	249 50	175 50	.....	468 85	162 95	121 35	83 00	1,237 49	1,707 49	391 64
Lewis and Clarke .....	949 95	335 80	.....	840 35	461 15	.....	3,000 00	16,997 11	2,000 00	2,000 00
Madison .....	217 30	95 00	.....	364 95	424 60	.....	1,750 00	3,500 00	930 00	350 00
Meagher .....	67 00	13 00	.....	33 85	.....	.....	.....	363 30	43 40	412 83
Missoula .....	1,084 15	301 80	.....	1,428 60	227 45	.....	9 00	3,249 51	916 45	528 83
Park .....	304 50	157 15	.....	158 40	96 35	.....	365 69	1,417 79	2,253 45	255 83
Ravalli .....	437 90	118 60	100 00	443 70	100 00	137 55	.....	.....	3,027 48	1,700 00
Silver Bow .....	3,802 15	1,363 50	.....	2,960 50	3,529 30	.....	.....	12,989 42	22,752 25	2,529 24
Sweet Grass .....	132 20	26 00	.....	36 60	19 85	8 00	.....	.....	459 70	300 00
Teton .....	334 50	36 00	72 00	4 00	170 40	101 40	.....	266 45	164 15	291 33
Valley .....	213 75	231 00	27 00	63 10	235 60	.....	.....	.....	1,367 15	750 00
Yellowstone .....	296 40	87 20	163 70	108 40	357 10	158 50	.....	1,581 64	1,300 40	300 00
Total .....	\$13,894 39	\$4,961 45	\$1,068 70	\$12,762 25	\$7,469 99	\$2,407 20	\$6,795 77	\$57,375 01	\$74,653 18	\$19,070 41

## STATEMENT OF COUNTY EXPENSES 1898—Continued.

COUNTIES.	OTHER EXPENDITURES.						
	Salaries of County Officers .....	Salaries of Deputy County officers ..	Books and Stationery .....	Printing and Advertising .....	Fuel, Lights, Water, Ice, etc .....	Erection of Public Buildings other than at Poor Farm .....	Permanent improvement on buildings other than at Poor Farm .....
Beaverhead .....	\$5,000 00	\$2,553 70	.....	\$875 01	\$125 20	.....	.....
Broadwater .....	10,564 00	.....	3,869 67	1,274 77	214 06	.....	.....
Carbon .....	6,360 20	1,150 00	1,184 97	592 08	220 52	.....	.....
Cascade .....	11,250 00	11,394 17	1,157 56	10,662 97	1,412 10	400 41	.....
Choteau .....	7,245 16	2,000 00	1,433 58	491 60	587 34	.....	.....
Custer .....	9,567 50	2,868 29	664 15	1,110 25	1,406 09	.....	.....
Dawson .....	5,577 53	.....	699 29	858 50	144 13	.....	.....
Deer Lodge .....	10,414 41	6,161 92	2,084 97	3,657 23	2,858 05	16,949 40	.....
Fergus .....	7,885 79	2,476 00	963 21	1,181 18	1,077 11	.....	.....
Flathead .....	8,003 30	3,124 63	1,425 07	263 23	1,219 46	.....	.....
Gallatin .....	7,800 00	2,325 00	.....	7,128 57	.....	.....	.....
Granite .....	13,398 98	.....	.....	1,484 50	950 59	1,232 48	.....
Jefferson .....	6,231 60	2,086 54	1,523 64	564 14	1,522 32	.....	.....
Lewis and Clarke .....	15,365 40	9,456 61	1,542 62	5,639 55	2,408 37	.....	.....
Madison .....	6,800 00	1,492 56	419 29	1,680 22	193 48	650 00	.....
Meagher .....	7,967 20	1,913 72	524 16	963 67	222 50	.....	.....
Missoula .....	9,525 97	5,333 37	972 89	1,021 79	824 70	1,040 60	.....
Park .....	7,025 45	2,554 71	384 25	2,045 57	1,243 62	.....	.....
Ravalli .....	6,918 76	2,000 00	514 56	688 61	968 81	.....	.....
Silver Bow .....	30,475 75	41,903 64	1,883 68	5,651 01	3,499 05	.....	.....
Sweet Grass .....	4,300 00	900 00	906 70	563 79	209 22	6,791 55	.....
Teton .....	6,641 24	1,626 68	308 22	626 29	350 79	1,768 50	.....
Valley .....	11,379 35	.....	116 00	892 00	737 85	.....	.....
Yellowstone .....	9,523 59	.....	1,806 57	1,088 60	1,276 32	.....	.....
Total .....	\$226,009 72	\$102,327 54	\$24,385 05	\$51,011 15	\$22,745 68	\$27,600 46	\$22,920 86
							\$17,511 71

## STATEMENT OF COUNTY EXPENSES 1898—Continued.

COUNTIES.	OTHER EXPENDITURES.					
	Election expenses	Bridges Road and Highways	Interest paid on County bonds	Interest paid on County warrants	All other expenses	Total
Beaverhead	.....	\$7,196 73	\$4,970 00	\$450 74	\$574 65	\$36,016 12
Broadwater	.....	7,988 22	2,790 00	130 73	7,824 31	46,760 09
Carbon	34 90	8,764 90	3,420 00	266 51	2,087 86	32,994 23
Cascade	1,618 44	24,785 04	22,571 18	.....	.....	128,729 80
Choteau	.....	6,019 75	12,044 43	2,373 34	7,688 78	72,368 81
Custer	3 80	8,524 63	16,440 00	08	.....	80,611 51
Dawson	.....	6,930 85	6,121 90	2,166 34	413 00	29,875 10
Deer Lodge	2,304 90	16,308 92	7,590 00	5,228 44	10,206 51	143,878 77
Fergus	.....	10,614 55	6,210 90	153 61	2,373 89	53,460 08
Flathead	6 00	8,241 07	6,000 00	3,863 58	3,084 20	69,530 07
Gallatin	.....	33,379 74	5,714 24	6,390 18	.....	83,868 72
Granite	.....	11,170 83	.....	.....	1,118 91	39,009 93
Jefferson	.....	7,093 41	25,000 00	9,471 01	3,688 96	74,527 82
Lewis and Clarke	15 75	17,795 04	10,450 00	1,897 87	7,897 87	146,123 88
Madison	2 75	17,893 52	5,500 00	79 46	151 25	71,410 62
Meagher	5 00	5,775 83	10,658 29	.....	25 00	37,895 00
Missoula	.....	9,528 34	16,040 00	7,216 45	2,079 37	86,147 78
Park	10 00	7,169 11	12,800 00	.....	2,170 37	53,801 99
Ravalli	88 87	10,477 22	4,590 00	1,485 41	779 19	46,997 11
Silver Bow	928 14	35,401 66	6,250 10	.....	36,197 48	304,955 70
Sweet Grass	6 00	7,071 88	5,560 00	93 03	2,304 66	36,372 57
Teton	.....	4,322 84	3,609 00	67 00	2,367 65	33,967 99
Valley	.....	1,223 20	4,690 00	1,802 91	.....	36,638 22
Yellowstone	35 55	7,033 84	9,953 00	1,228 47	2,604 40	57,833 73
Total	\$5,162 10	\$280,652 12	\$208,733 04	\$44,957 32	\$95,638 31	\$1,795,675 64

County warrants redeemed .....

County Bonds Redeemed.....

Total .....

All other expenses

Interest paid on County warrants

Interest paid on County bonds ..

Bridges Road and Highways .....

Election expenses ..



## ITEMIZED STATEMENT OF COUNTY EXPENSES.

STATEMENT SHOWING BY COUNTIES THE AMOUNT PAID OUT ON ACCOUNT OF THE FOLLOWING CLASSIFIED EXPENSES FOR THE FISCAL YEAR ENDED NOVEMBER 30, 1899, AS REPORTED BY COUNTY CLERKS.

COUNTIES.	COURT EXPENSE.										
	Salary of the Clerk of the District Court .....	Salaries of Deputy Clerks of the District Court .....	Salary of County Attorney and Assistants ..	Salary and mileage of Stenographer .	Salary of Sheriff...	Salaries of Deputy Sheriffs, Baliffs, etc .....	Expense of Sheriff's office .....	Board of Prisoners	Jurors fees, per diem and mileage	Witness fees, per diem and mileage	Contingent or miscellaneous court expenses .....
Beaverhead .....	\$1,200 00	\$900 00	\$600 00	\$595 30	\$2,000 00	\$1,500 00	.....	\$315 00	\$1,710 60	\$629 70	.....
Broadwater .....	1,200 00	3 00	508 37	554 25	1,816 66	1,234 00	415 35	448 70	606 10	593 30	70 25
Carbon .....	1,200 00	77 50	643 35	383 78	1,800 00	2,339 12	775 90	933 55	1,883 80	1,146 40	513 30
Cascade .....	2,750 00	1,200 00	1,488 00	2,950 00	3,791 17	8,053 96	1,955 60	3,422 10	4,108 90	1,703 60	337 35
Choteau .....	1,800 00	200 00	750 00	750 00	2,250 00	2,160 00	2,954 05	1,551 45	3,571 10	2,998 80	1,200 00
Custer .....	2,000 00	.....	2,000 00	954 54	2,750 00	3,223 57	.....	1,385 92	2,515 00	1,590 90	1,539 67
Dawson .....	1,200 00	.....	1,169 32	397 75	1,962 19	1,553 75	336 27	241 00	2,515 00	1,824 40	369 67
Deer Lodge .....	2,000 00	1,503 22	2,102 66	1,434 02	2,750 00	7,023 94	4,580 98	5,633 50	5,987 20	4,484 90	1,967 55
Fergus .....	1,800 00	294 50	750 00	1,254 30	2,250 00	2,065 77	1,891 57	1,787 00	2,291 40	1,484 10	28 50
Flathead .....	1,200 00	900 00	826 30	1,596 81	2,000 00	4,083 00	2,833 14	488 00	2,044 90	1,009 00	.....
Gallatin .....	2,000 00	1,200 00	2,000 00	1,800 00	2,750 00	2,520 00	1,405 97	1,568 00	2,044 90	1,009 00	.....
Granite .....	1,200 00	.....	850 00	400 15	2,000 00	.....	633 86	462 30	2,848 80	888 20	195 50
Jefferson .....	1,200 00	133 50	600 00	567 80	2,000 00	2,984 50	1,496 60	399 00	7,049 40	872 50	2,423 40
Lewis and Clarke .....	3,000 00	5,100 00	3,678 62	3,724 94	3,500 00	6,000 00	1,671 13	3,561 78	2,604 90	779 60	.....
Madison .....	1,200 00	425 00	600 00	607 00	2,000 00	1,400 00	968 75	832 60	2,604 90	779 60	.....
Meagher .....	1,800 00	.....	725 00	298 45	2,000 00	1,682 86	622 75	55 00	580 60	323 10	.....
Missoula .....	1,999 97	1,200 00	1,049 97	1,144 80	2,758 30	4,658 31	2,242 58	3,231 00	2,785 50	724 00	427 75
Park .....	1,200 00	900 00	899 20	1,103 85	2,000 00	3,706 30	.....	955 05	1,650 60	2,104 70	.....
Ravalli .....	1,200 00	900 00	702 60	666 20	2,000 00	3,000 00	2,014 28	622 85	1,786 50	1,726 70	169 65
Silver Bow .....	3,500 00	10,427 65	6,240 00	3,600 00	4,500 00	11,400 01	12,080 38	16,712 25	24,466 80	3,036 00	.....
Sweet Grass .....	1,200 00	.....	1,183 33	385 08	1,925 33	1,261 01	810 88	227 40	648 80	354 20	.....
Teton .....	1,200 00	33 00	850 00	404 03	2,000 01	3,851 00	2,449 55	746 45	1,824 90	1,290 55	318 25
Valley .....	1,200 00	.....	500 00	187 80	1,800 00	3,120 00	328 00	708 05	1,631 40	1,484 20	.....
Yellowstone .....	1,200 00	.....	726 25	1,035 93	4,957 30	1,010 07	1,133 00	2,368 80	1,564 60	461 30	.....
Total .....	\$39,449 97	\$25,397 37	\$31,442 97	\$25,807 38	\$59,561 90	\$80,471 18	\$63,660 05	\$48,646 75	\$81,388 85	\$23,660 05	\$10,097 38

## STATEMENT OF COUNTY EXPENSES 1899.—Continued.

COUNTIES.	JUSTICE AND CORONER'S COURTS.					POOR FUND.				
	Fees of Justices of the Peace .....	Fees of Jurors ....	Fees of Witnesses.	Fees of Constables.	Fees and expenses of Coroner .....	All other items of Justices and Cor- oner's courts ....	Acquiring and im- proving Poor Farm .....	Maintenance of Poor at Poor Farm .....	Aid of poor other than at Poor Farm.....	Medical attendance and medicines for County Poor .....
Beaverhead .....	\$187 60	\$22 00	.....	\$147 65	\$134 00	.....	.....	\$3,164 80	\$1,002 90	\$802 21
Broadwater .....	102 30	121 00	.....	6 70	226 70	.....	.....	2,000 00	142 34	655 00
Carbon .....	273 60	63 00	.....	163 20	200 00	148 65	.....	.....	951 89	400 00
Cascade .....	1,224 45	434 50	.....	488 80	.....	.....	298 54	4,869 73	6,391 30	1,282 22
Choteau .....	982 20	204 00	.....	988 15	650 00	550 00	.....	1,704 66	7,259 69	2,190 00
Custer .....	369 65	177 80	87 00	415 15	46 40	385 40	719 20	109 00	837 57	385 40
Dawson .....	143 30	104 80	.....	75 14	31 70	6 60	.....	.....	604 58	583 00
Deer Lodge .....	1,671 55	594 00	.....	1,270 55	195 15	589 58	.....	.....	19,186 35	1,498 00
Fergus .....	621 00	93 00	.....	117 20	205 40	.....	.....	3,075 16	1,466 86	452 18
Flathead .....	530 28	65 50	.....	475 45	284 00	204 00	.....	1,283 00	1,437 84	550 16
Gallatin .....	293 05	160 55	.....	47 45	290 25	39 45	.....	4,346 03	.....	.....
Granite .....	352 50	63 00	.....	167 30	.....	39 00	.....	.....	4,294 58	.....
Jefferson .....	445 45	250 50	.....	289 20	.....	.....	199 39	1,079 82	2,087 38	380 00
Lewis and Clarke .....	593 55	433 00	.....	496 83	477 75	.....	16,000 00	16,200 00	1,629 94	1,800 00
Madison .....	253 70	93 00	.....	305 05	184 70	.....	2,050 00	3,818 39	900 00	350 00
Meagher.....	60 00	126 00	.....	.....	11 95	.....	42 00	874 54	440 00	531 83
Missoula .....	1,098 48	310 00	.....	1,547 83	319 05	5 00	195 75	2,599 16	3,919 01	454 00
Park .....	253 40	106 90	.....	289 20	131 65	.....	353 05	1,170 17	2,416 21	396 00
Ravalli .....	412 15	144 90	63 23	500 00	130 15	163 00	.....	.....	2,606 75	400 00
Silver Bow .....	3,718 85	1,196 20	.....	3,053 19	4,428 70	.....	.....	13,064 42	31,048 90	2,508 74
Sweet Grass .....	87 30	34 70	.....	23 60	59 10	.....	.....	.....	807 40	300 00
Teton .....	217 80	27 00	99 60	42 83	153 80	123 81	.....	822 07	305 15	649 57
Valley .....	203 00	91 00	.....	76 00	209 60	37 50	.....	.....	1,947 90	700 00
Yellowstone .....	380 20	15 60	309 10	300 16	454 75	332 50	.....	3,131 83	1,463 74	300 00
Total .....	\$14,484 36	\$5,227 95	\$558 93	\$11,273 93	\$8,895 40	\$2,615 48	\$19,923 98	\$62,312 78	\$93,148 88	\$17,568 31

## STATEMENT OF COUNTY EXPENSES 1899.—Continued.

COUNTIES.	OTHER EXPENDITURES.					
	Salaries of County Officers .....	Salaries of Deputy County officers ..	Books and Stationery .....	Printing and Advertising .....	Fuel, Lights, Water, Ice, etc .....	Erection of public buildings other than at Poor Farm .....
Beaverhead .....	\$5,000 00	\$3,102 80	\$948 45	\$2,321 65	\$574 55	.....
Broadwater .....	8,613 54	7 50	7 50	1,918 19	233 69	.....
Carbon .....	7,171 40	1,290 00	1,789 38	2,564 01	542 94	13,848 36
Cascade .....	11,250 00	9,360 43	133 95	8,417 57	911 00	.....
Choteau .....	6,717 57	2,000 00	1,719 24	702 97	573 15	1,176 65
Custer .....	9,474 30	2,481 11	440 79	1,137 83	870 29	614 35
Dawson .....	6,263 74	.....	190 90	528 00	171 09	345 00
Deer Lodge .....	11,777 67	5,141 73	2,658 97	1,645 81	3,166 32	66,891 76
Pergus .....	7,517 87	3,518 77	848 22	1,401 12	1,073 98	.....
Flathead .....	7,854 75	3,065 21	900 92	1,746 55	942 34	472 65
Gallatin .....	7,800 00	2,325 00	833 49	4,458 78	491 54	3,267 11
Granite .....	13,446 80	.....	2,890 06	.....	684 08	.....
Jefferson .....	6,579 20	2,573 00	1,133 67	491 41	1,434 10	214 35
Lewis and Clarke .....	15,761 00	10,432 66	867 06	6,263 41	2,880 68	.....
Madison .....	7,000 00	1,274 27	715 60	1,866 52	488 45	17,972 33
Meagher .....	7,505 41	1,195 66	233 47	742 06	601 66	1,152 55
Missoula .....	8,749 68	5,450 63	378 52	1,451 57	1,108 65	7 00
Park .....	6,872 00	2,433 91	1,462 79	2,071 81	932 06	564 80
Ravalli .....	8,035 21	2,100 00	571 77	800 00	.....	2,171 63
Silver Bow .....	24,047 13	44,937 06	1,557 20	22,547 85	2,859 13	1,271 97
Sweet Grass .....	5,441 66	975 00	1,037 23	913 44	207 20	3,469 83
Teton .....	7,105 11	675 00	604 33	1,379 66	258 37	436 41
Valley .....	5,390 00	150 00	69 70	1,265 91	976 77	333 00
Yellowstone .....	11,159 11	*	1,914 78	1,651 16	1,699 21	71 25
Total .....	\$217,133 21	\$104,931 70	\$23,817 99	\$67,887 31	\$23,781 23	1,677 48
						\$80,514 32
						\$22,633 13
						\$14,266 66

\* Included in salary of officers.



## STATEMENT OF COUNTY EXPENSES 1899.—Continued.

COUNTIES.	OTHER EXPENDITURES.						
	Election expenses.	Bridges, Roads and Highways ..	Interest paid on County bonds ....	Interest paid on County warrants.	All other expenses.	Total ..	County bonds re-deemed.....
Beaverhead .....	\$1,180 20	\$10,772 97	\$4,820 40	\$727 47	.....	\$45,673 55	.....
Broadwater .....	1,256 34	5,968 54	3,720 00	872 94	2,797 34	36,664 45	35,272 20
Carbon .....	1,114 20	16,179 61	3,420 00	483 33	3,340 36	64,000 02	31,973 95
Cascade .....	1,229 63	30,631 96	22,571 18	.....	.....	131,010 70	127,096 14
Choteau .....	1,704 33	18,284 37	12,033 95	20 88	9,092 68	87,065 24	75,470 49
Custer .....	1,593 67	9,608 74	16,440 00	17 80	.....	66,948 49	1,018 80
Dawson .....	483 55	2,942 37	6,226 63	629 82	2,404 56	33,579 38	35,495 56
Deer Lodge .....	6,121 07	20,776 05	11,500 00	2,442 77	11,307 25	208,064 31	174,936 64
Fergus .....	2,037 79	19,301 71	6,000 90	179 61	9,097 55	73,315 71	71,525 09
Flathead .....	2,203 52	17,613 54	6,000 00	9,713 98	1,802 04	77,551 94	76,024 55
Gallatin .....	1,701 85	20,091 56	5,714 24	205 61	109 50	67,808 32	.....
Granite .....	2,702 43	15,722 73	.....	.....	2,294 90	51,364 25	.....
Jefferson .....	2,076 73	13,529 42	15,000 00	7,251 76	1,857 63	69,816 94	.....
Lewis and Clarke .....	3,590 51	19,177 41	10,450 00	1,624 85	15,318 49	164,218 94	65,288 74
Madison .....	2,936 94	17,617 63	5,500 00	128 09	696 20	76,721 27	84,977 38
Meagher .....	1,001 51	5,349 64	8,921 13	.....	360 00	36,151 62	.....
Missoula .....	2,615 14	10,546 89	16,022 60	10,727 88	2,083 39	93,634 63	72,763 91
Park .....	1,338 03	8,701 95	12,800 00	.....	1,982 05	60,322 51	.....
Ravalli .....	2,324 30	16,329 16	4,500 00	2,045 11	3,463 36	59,044 84	36,740 30
Silver Bow .....	15,310 48	34,235 95	6,250 00	.....	77,631 72	389,566 73	.....
Sweet Grass .....	563 54	6,938 79	5,700 00	1 88	989 54	31,512 04	27,123 69
Teton .....	1,155 90	16,416 65	3,609 00	27 20	2,052 04	53,418 97	36,517 15
Valley .....	529 71	13,847 39	4,690 00	1,802 97	3,897 65	46,828 80	55,095 43
Yellowstone .....	938 29	12,605 92	8,120 72	149 03	3,221 58	64,297 41	60,139 92
Total .....	\$57,703 66	\$360,190 85	\$200,070 65	\$40,054 98	\$155,194 83	\$2,089,841 09	.....

REVENUE FROM LICENSES BY COUNTIES DURING THE FISCAL YEAR ENDED NOVEMBER 30TH, 1898, AS REPORTED BY COUNTY TREASURERS.

COUNTIES	Assayers	Attorneys	Auctioneers	Bankers	Billiard Tables	Brewers	Builders, Manufacturers, etc.	Butchers	Cigarette Selling	Common Carriers	Dentists	Hotels, Restaurants and Lodging Houses	Real Estate Agents, Loans and Insurance	Intelligence Offices	Laundries	Liquor Selling at Retail	Livery, Hacks, Express, etc.
Beaverhead	.....	\$120 00	\$6 00	.....	\$109 25	\$55 00	.....	\$49 00	\$60 00	.....	\$45 00	\$302 01	\$120 00	.....	\$112 00	\$9,538 00	\$151 00
Broadwater	.....	21 00	.....	.....	38 75	.....	.....	34 00	.....	.....	.....	1 08 00	5 00	.....	.....	4,839 00	75 00
Carbon	.....	.....	.....	130 00	.....	.....	.....	.....	360 00	37 50	176 50	1,354 00	480 50	.....	331 50	5,620 00	90 00
Cascade	.....	587 00	6 00	587 00	410 84	604 00	.....	.....	.....	.....	6 00	66 00	20 00	.....	11 00	42,624 00	985 30
Choteau	.....	12 00	11 00	.....	3 75	.....	.....	34 00	11 00	.....	.....	145 00	40 00	.....	100 00	704 00	24 00
Custer	.....	.....	.....	150 00	49 75	.....	.....	.....	120 00	.....	.....	55 00	35 00	.....	30 00	8,460 00	15 00
Dawson	.....	.....	.....	70 00	90 00	.....	.....	51 00	.....	.....	25 00	928 00	114 00	.....	261 00	2,850 00	45 00
Deer Lodge	.....	131 00	18 00	522 00	156 75	222 00	\$55 00	324 00	286 00	106 50	114 00	297 00	51 00	.....	16 00	38,031 00	569 00
Fergus	.....	145 50	18 00	.....	.....	62 00	.....	20 30	30 00	.....	.....	45 00	35 00	.....	20 00	8,343 00	168 00
Flathead	.....	25 00	.....	20 00	15 00	22 50	.....	6 00	.....	.....	.....	.....	.....	.....	150 00	2,760 00	.....
Gallatin	.....	190 00	35 00	.....	82 50	137 50	.....	89 00	120 00	.....	40 00	250 00	100 00	.....	150 00	8,400 00	140 00
Granite	.....	68 00	6 00	120 00	45 75	31 00	.....	92 00	300 50	.....	48 00	338 00	24 00	.....	55 00	7,904 00	264 00
Jefferson	.....	65 00	.....	.....	.....	.....	.....	189 00	1,104 00	50 00	30 00	430 00	65 00	.....	70 00	10,450 00	170 00
Lewis & Clarke	.....	1,300 00	60 00	321 00	128 00	360 00	252 00	436 00	200 00	.....	200 00	1,080 00	280 00	44 00	445 00	36,576 00	800 00
Madison	.....	.....	.....	.....	.....	.....	.....	12 00	.....	.....	.....	30 00	.....	.....	.....	503 00	22 00
Meagher	.....	20 00	.....	.....	.....	.....	.....	39 00	.....	75 00	.....	55 00	10 00	.....	30 00	2,300 00	30 00
Missoula	.....	100 00	.....	.....	30 00	300 00	.....	145 00	120 00	.....	40 00	145 00	60 00	.....	.....	18,710 00	180 00
Park	.....	70 00	15 00	80 00	7 50	.....	.....	42 00	240 00	.....	30 00	17 00	45 00	.....	150 00	8,290 00	47 00
Ravalli	.....	12 00	.....	.....	.....	.....	.....	127 00	11 00	.....	24 00	158 00	.....	.....	121 00	5,481 00	33 00
Silver Bow	.....	300 00	40 00	1,660 00	262 50	465 00	90 00	.....	1,250 00	.....	175 00	1,970 00	465 00	90 00	1,225 00	80,660 00	452 00
Sweet Grass	.....	20 00	.....	.....	37 50	.....	.....	.....	.....	.....	15 00	102 00	70 00	.....	80 00	2,300 00	25 00
Teton	.....	30 00	.....	.....	.....	.....	.....	27 00	.....	.....	10 00	135 00	.....	.....	20 00	3,900 00	50 00
Valley	.....	40 50	.....	50 00	.....	.....	.....	66 80	20 00	.....	20 00	92 00	10 00	.....	.....	3,680 00	.....
Yellowstone	.....	5 00	.....	.....	22 50	.....	.....	.....	350 00	.....	20 00	300 00	5 00	.....	60 00	13,030 00	.....
Total	.....	\$3,262 00	215 00	\$3,751 00	\$1,490 34	\$2,259 00	397 00	\$1,813 10	\$4,032 00	569 50	\$1,048 50	\$8,425 00	\$2,034 50	\$134 00	\$2,327 50	\$326,728 00	\$4,398 30
Per ct. paid by each business	.....	.74	.05	.85	.34	.51	.09	.41	.91	.13	.24	1.90	.46	.03	.60	73.76	.99

SEVENTH ANNUAL REPORT OF BUREAU

REVENUE FROM LICENSES, 1903.—Continued.

COUNTIES	Merchants, Including Liquors at Wholesale	Oleomargarine and Butterine	Pawnbrokers and Peddlers	Pools on Races	Power & Light Companies	Photographers	Physicians and Surgeons	Street Railways	Telegraphs and Telephones	Theatres	Water Companies	All others	Total	Percent of Total Amount of Li- censes Paid by each County
Beaverhead .....	\$2,018 00	.....	\$133 50	.....	.....	.....	\$87 00	.....	.....	\$75 00	.....	\$551 25	\$14,405 00	3.26
Broadwater .....	773 00	.....	72 00	.....	.....	.....	48 00	.....	12 00	.....	.....	.....	6,080 75	1.37
Carbon .....	485 00	.....	150 00	.....	.....	10 00	.....	.....	.....	.....	.....	550 50	7,050 50	1.53
Cascade .....	7,704 55	.....	404 00	.....	278 00	73 40	522 50	201 00	216 60	82 00	322 33	494 15	68,902 27	13.30
Choteau .....	190 00	.....	13 50	.....	.....	.....	48 00	.....	.....	.....	.....	.....	1,154 25	.26
Custer .....	1,642 00	.....	.....	.....	.....	.....	5 00	.....	.....	.....	.....	115 00	10,841 75	2.44
Dawson .....	309 00	.....	55 00	.....	.....	5 00	25 00	.....	.....	65 00	.....	10 00	3,730 00	.84
Deer Lodge .....	5,535 00	.....	385 50	676 00	.....	36 00	327 00	102 00	.....	355 00	51 00	318 00	50,283 75	11.35
Fergus .....	1,484 30	.....	330 00	.....	25 00	27 00	100 00	.....	11 00	.....	.....	34 00	11,133 10	2.52
Flathead .....	121 50	.....	.....	.....	100 00	.....	25 00	.....	.....	40 00	.....	.....	3,255 00	.73
Gallatin .....	2,115 00	.....	155 00	.....	63 00	30 00	150 00	100 00	57 25	125 00	100 00	265 63	12,964 88	2.92
Granite .....	1,100 00	.....	.....	.....	.....	6 00	99 00	.....	11 13	13 50	102 00	.....	10,548 88	2.38
Jefferson .....	900 00	.....	242 50	.....	.....	.....	100 00	.....	.....	40 00	.....	20 00	12,951 50	2.92
Lewis and Clarke .....	7,612 00	.....	672 00	.....	404 00	64 00	324 00	204 00	187 50	244 00	400 00	437 10	54,044 60	12.20
Madison .....	82 00	.....	.....	.....	.....	.....	6 00	.....	.....	.....	.....	.....	655 00	.15
Meagher .....	390 00	.....	120 00	.....	.....	.....	80 00	.....	.....	5 00	.....	.....	3,154 00	.71
Missoula .....	2,026 00	.....	40 00	.....	50 00	.....	140 00	.....	.....	925 00	.....	406 00	23,452 00	5.29
Park .....	712 00	.....	.....	.....	.....	.....	50 00	.....	42 75	25 00	100 00	125 00	10,181 25	2.30
Ravalli .....	1,256 00	.....	93 00	25 00	.....	6 00	84 00	.....	9 25	6 00	102 00	148 00	7,637 25	1.74
Silver Bow .....	12,562 00	.....	1,207 50	750 00	600 00	100 00	515 00	150 00	339 00	575 00	600 00	4,835 25	111,329 25	25.13
Sweet Grass .....	415 00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	30 50	.70
Teton .....	970 00	.....	60 00	.....	.....	5 00	75 00	.....	24 75	.....	.....	25 00	6,331 75	1.24
Valley .....	383 90	.....	50 00	.....	.....	.....	20 50	.....	.....	5 00	.....	.....	4,418 70	1.00
Yellowstone .....	1,890 00	.....	37 50	.....	.....	35 40	20 00	.....	125 00	.....	.....	306 00	16,226 00	3.66
Total .....	\$53,796 25	.....	\$4,221 00	\$1,452 01	\$1,521 00	\$37 60	\$2,801 00	\$757 00	\$1,026 63	\$2,580 50	\$1,777 33	\$8,471 38	\$442,946 43	100.00
Per ct. paid by each business.....	12.14	.....	.95	.23	.34	.09	.65	.17	.23	.58	.40	1.96	100.00	.....



REVENUE FROM LICENSES BY COUNTIES DURING THE FISCAL YEAR ENDED NOVEMBER 30, 1899, AS REPORT-  
ED BY COUNTY TREASURERS.

COUNTIES	Assayers	Attorneys	Auction'rs	Bankers	Billiard Tables	Brewers	Builders, Manufactu- rers, etc.	Butchers	Cigarrette selling	Common Carriers	Dentists	Gambling	Hotels, Res- taurants, Lodging Houses	Real Estate Agents, Loans and Insurance	Intelligence Offices	Laundries
Beaverhead .....	29 00	15 00	.....	10 00	118 75	60 00	.....	54 00	30 00	30 00	30 00	.....	170 00	110 00	.....	100 00
Broadwater .....	.....	.....	.....	80 00	46 00	.....	.....	25 00	.....	.....	.....	.....	126 00	.....	.....	.....
Carbon .....	.....	.....	.....	110 00	50 00	.....	.....	.....	.....	.....	.....	.....	.....	65 00	.....	.....
Cascade .....	505 00	15 00	.....	182 00	405 75	600 00	.....	40 00	313 00	313 00	182 50	.....	1,343 00	439 50	.....	290 33
Choteau .....	81 00	.....	.....	.....	39 00	.....	.....	15 00	111 00	111 00	35 00	.....	324 05	55 50	.....	131 00
Custer .....	145 00	.....	.....	60 00	116 25	.....	.....	36 00	110 00	110 00	50 00	.....	170 00	200 00	.....	90 00
Dawson .....	35 00	.....	.....	160 00	90 00	.....	.....	.....	.....	.....	20 00	.....	70 00	50 00	.....	40 00
Deer Lodge .....	123 00	15 00	.....	1,124 00	174 25	227 00	41 00	418 00	.....	153 00	113 00	.....	785 00	143 00	.....	273 00
Fergus .....	155 50	5 00	.....	.....	124 17	61 00	.....	70 20	91 00	12 50	43 50	.....	203 00	107 00	.....	77 50
Flathead .....	.....	15 00	.....	40 00	105 00	90 00	.....	60 00	10 00	10 00	81 00	.....	216 00	115 00	.....	125 00
Gallatin .....	235 00	45 00	.....	.....	82 50	90 00	.....	66 00	120 00	.....	65 00	.....	265 00	155 00	.....	355 00
Granite .....	128 00	31 00	.....	41 00	62 00	61 00	.....	116 00	.....	165 50	42 00	.....	395 00	68 00	.....	174 00
Jefferson .....	40 00	10 00	.....	30 00	.....	.....	.....	174 00	.....	.....	30 00	.....	410 00	105 00	.....	90 00
Lewis & Clarke .....	1,130 00	45 00	.....	720 00	115 00	360 00	240 00	490 00	1,200 00	50 00	300 00	.....	1,050 00	320 00	20 00	520 00
Madison .....	46 00	.....	.....	455 00	70 50	45 00	.....	168 00	.....	.....	10 00	.....	300 00	.....	.....	.....
Meagher .....	70 00	.....	.....	.....	.....	.....	.....	42 00	.....	.....	20 00	.....	30 00	75 00	.....	60 00
Missoula .....	180 00	.....	.....	.....	60 00	300 00	.....	168 00	120 00	.....	80 00	.....	220 00	100 00	.....	.....
Park .....	60 00	.....	.....	40 00	.....	.....	.....	87 00	120 00	.....	15 00	.....	150 00	95 00	.....	90 00
Ravalli .....	41 00	20 00	.....	.....	41 25	.....	.....	133 00	10 00	.....	46 00	.....	218 00	35 00	.....	140 00
Silver Bow .....	910 00	70 00	.....	760 00	273 75	835 00	60 00	.....	1,520 00	.....	270 00	.....	2,380 00	505 00	140 00	1,275 00
Sweet Grass .....	55 00	10 00	.....	.....	52 50	.....	.....	.....	.....	.....	.....	.....	98 00	85 00	.....	80 00
Teton .....	40 00	.....	.....	.....	.....	.....	.....	29 00	.....	.....	35 00	.....	.....	.....	.....	50 00
Valley .....	35 50	.....	.....	60 00	.....	.....	.....	48 00	.....	.....	5 00	.....	115 00	.....	.....	.....
Yellowstone .....	95 00	.....	.....	.....	82 55	187 50	.....	97 00	240 00	.....	50 00	.....	327 50	115 00	.....	170 00
Total .....	\$60 00	\$4,154 00	281 00	\$3,872 00	\$2,109 22	\$2,916 50	\$41 00	\$2,346 20	\$3,986 00	381 00	\$1,543 00	.....	\$9,501 55	\$2,942 00	160 00	\$4,130 83
Per ct. paid by each business	.01	.78	.05	.54	.39	.54	.06	.44	.75	.07	.29	.....	1.77	.55	.....	.77

## SEVENTH ANNUAL REPORT OF BUREAU

## REVENUE FROM LICENSES, 1899—Continued.

COUNTIES	Retail Liquor Selling	Livery, Hacks, Express, etc.	Merchants, including Liquor at Wholesale	Oleomargarine and Butterine	Pawnbrokers and Peddlers	Pools on Races	Power & Light Companies	Photographers	Physicians and Surgeons	Street Railways	Telegraphs and Telephones	Theatres	Water Companies	All others	Total	Per Ct. of Total Amt of licenses pd. by each Co.
Beaverhead	\$9,853 00	\$165 00	\$3,112 00	.....	\$206 00	.....	.....	.....	\$51 00	.....	.....	21 00	.....	\$185 75	\$14,304 50	2 67
Broadwater	5,362 00	52 00	753 00	.....	20 00	.....	.....	\$10 00	76 00	.....	.....	30 00	.....	.....	6,593 00	1 23
Carbon	9,770 00	95 00	893 00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	417 00	11,450 00	2 11
Cascade	36,837 00	1,009 90	7,378 75	.....	537 35	.....	.....	276 00	530 50	200 00	.....	140 00	126 00	482 45	51,923 28	9 69
Choteau	12,763 00	124 00	1,362 70	.....	357 50	.....	.....	.....	101 00	.....	.....	196 50	.....	47 00	15,733 25	2 95
Custer	9,592 82	222 00	1,985 00	.....	42 50	.....	.....	15 00	190 00	.....	.....	30 00	125 00	.....	13,158 57	2 45
.....awson	2,450 00	21 00	372 00	.....	50 00	.....	.....	5 00	45 00	.....	.....	50 00	.....	20 00	3,514 00	66
Deer Lodge	33,734 00	538 65	6,642 60	.....	534 00	.....	.....	100 00	314 00	200 00	46 00	323 00	150 00	.....	46,607 50	8 70
Fergus	10,441 00	176 50	1,836 60	.....	514 50	.....	.....	25 00	212 00	.....	37 00	84 00	.....	146 50	14,437 47	2 70
Flathead	8,970 00	152 00	4,303 00	.....	20 00	.....	.....	100 00	129 00	.....	.....	142 00	.....	.....	14,664 00	2 74
Gallatin	9,240 00	150 00	1,957 00	.....	185 00	.....	.....	50 00	165 00	100 00	.....	163 00	.....	115 00	13,668 50	2 55
Granite	11,223 84	234 00	1,127 00	.....	150 00	.....	.....	5 00	135 00	.....	.....	35 00	50 00	100 00	14,344 34	2 68
Jefferson	10,937 50	150 00	1,134 00	.....	238 50	.....	.....	.....	135 00	.....	.....	67 00	.....	10 00	13,561 00	2 53
Lewis and Clarke	37,040 00	865 50	7,704 00	.....	705 00	.....	450 00	60 00	300 00	200 00	93 75	250 00	400 00	192 70	64,760 95	10 22
Madison	9,765 00	406 00	2,201 00	.....	335 00	.....	.....	.....	166 00	.....	.....	.....	50 00	50 00	14,127 50	2 64
Meagher	3,150 00	20 00	576 00	.....	90 00	.....	.....	.....	55 00	.....	.....	6 00	.....	.....	4,194 00	78
Missoula	20,950 00	244 00	2,536 00	.....	80 00	.....	50 00	.....	200 00	.....	.....	950 00	.....	203 00	26,441 00	4 93
Park	11,640 00	24 00	875 00	.....	87 50	.....	.....	.....	125 00	.....	.....	35 00	.....	15 00	13,448 50	2 51
Ravalli	5,562 00	87 00	1,284 00	.....	42 50	.....	.....	.....	.....	.....	.....	25 00	65 00	32 00	7,974 75	1 49
Silver Bow	109,640 00	531 60	17,871 00	.....	1,197 50	100 00	600 00	155 00	885 00	250 00	.....	375 00	600 00	3,042 00	144,305 75	26 83
Sweet Grass	2,700 00	80 00	400 00	.....	12 50	.....	.....	5 00	15 00	.....	.....	.....	.....	25 00	3,618 00	67
Teton	4,950 00	55 00	688 00	.....	12 50	.....	.....	.....	100 00	.....	.....	30 00	.....	15 00	6,149 50	1 15
Valley	5,765 00	.....	453 60	.....	12 50	.....	.....	.....	35 50	.....	.....	11 00	.....	.....	6,541 10	1 22
Yellowstone	15,720 00	.....	1,992 00	.....	75 00	.....	.....	30 00	135 00	.....	.....	.....	300 00	567 95	20,184 50	3 77
Total	\$398,056 16	\$5,343 05	69,467 25	.....	\$5,624 35	100 00	\$1,651 00	520 50	\$4,284 00	\$950 00	\$188 50	\$2,953 50	\$1,896 00	\$6,032 35	\$535,770 96	100 00
Per ct. paid by each business	74.30	1.00	12.97	.....	1.05	.02	.31	.10	.80	.18	.04	.55	.95	1.29	100.00	.....

**TABLE NO. 1.**  
**SHOWING THE SEVERAL CLASSES OF REAL PROPERTY AFTER EQUALIZATION BY COUNTY BOARDS OF**  
**EQUALIZATION FOR THE YEAR 1900.**

COUNTIES.	Acres of Land .....	Value of Real Estate .....	Value of improvements on same ..	Value of city and town lots ..	Value of improvements on same ..	Value of mining claims .....	Value of improvements on same ..	Value of telegraph lines .....	Value of telephone lines .....	Value of mining and irrigating ditches .....	Value of depots, round houses, etc.	Total value of all real estate and improvements ...
Beaverhead ...	205,997	\$692,019	\$392,367	\$182,676	\$359,570	\$17,186	\$59,925	\$5,460	\$6,707	.....	\$28,065	\$1,741,515
Broadwater ..	190,168	554,534	209,534	72,419	105,365	.....	.....	6,459	3,673	19,437	10,125	981,648
Carbon .....	32,074	339,730	319,375	99,379	167,480	.....	.....	1,885	380	34,350	7,350	970,529
Cascade .....	539,086	2,982,840	1,535,870	3,077,897	1,441,586	23,225	14,500	6,220	21,930	.....	69,380	9,173,448
Choteau .....	169,175	438,100	309,410	146,683	216,598	.....	.....	17,920	520	1,335	51,385	1,181,951
Custer .....	1,115,549	826,359	250,985	200,556	398,990	.....	.....	14,180	.....	1,210	34,406	1,726,686
Dawson .....	431,350	191,714	51,065	71,033	161,795	.....	.....	5,625	.....	.....	25,075	506,207
Deer Lodge ..	480,235	952,273	1,493,194	1,303,237	1,463,039	43,570	40,120	12,462	9,270	20,900	28,625	5,366,710
Fergus .....	632,307	1,109,050	485,820	131,032	270,500	.....	.....	.....	6,605	3,300	.....	2,006,307
Flathead .....	401,298	1,120,187	190,605	447,573	262,095	19,900	5,000	12,050	1,775	1,775	47,945	2,108,905
Gallatin .....	501,767	2,437,515	475,315	606,746	942,770	.....	.....	4,330	3,913	16,600	20,775	4,507,964
Granite .....	100,147	224,960	207,266	188,177	208,985	52,590	280,145	9,689	3,476	20,915	9,150	1,205,354
Jefferson .....	205,769	521,553	253,314	275,876	273,348	46,795	404,101	8,075	7,666	57,050	36,995	1,883,773
Lewis and Clarke ..	318,288	1,711,452	1,264,420	3,451,179	3,926,715	60,000	271,425	7,430	11,340	6,080	41,255	10,751,286
Madison .....	344,197	801,126	472,550	102,605	269,790	36,720	132,150	2,370	3,065	.....	7,060	1,827,435
Meagher .....	601,561	938,705	190,560	92,485	134,035	8,255	4,200	1,530	3,670	850	2,450	1,876,740
Missoula .....	382,177	1,538,580	301,062	946,030	969,139	.....	.....	19,470	10,182	7,460	36,300	2,828,223
Park .....	531,502	802,556	307,285	512,373	466,728	8,834	.....	3,890	3,049	8,630	.....	1,654,030
Ravalli .....	197,462	982,846	290,405	185,195	192,160	.....	.....	1,320	2,104	.....	.....	1,654,030
Silver Bow .....	36,395	275,210	575,020	8,152,990	5,897,790	95,615	928,900	8,245	33,655	19,575	48,890	16,005,890
Sweet Grass .....	471,204	598,671	132,441	72,953	124,280	.....	.....	6,000	350	.....	10,050	944,745
Teton .....	174,865	460,343	123,122	62,953	72,075	.....	.....	8,430	2,300	3,000	29,720	761,943
Valley .....	4,886	18,206	61,166	16,661	55,815	.....	.....	18,875	.....	.....	35,765	206,487
Yellowstone .....	810,384	897,534	199,629	490,018	656,249	.....	.....	16,875	4,425	43,680	34,130	2,342,544
Total .....	8,877,833	21,416,061	\$20,888,926	\$20,886,326	\$19,006,897	\$411,690	.....	\$ 198,804	\$140,055	\$266,148	\$612,836	75,173,763

TABLE NO. 2.

SHOWING THE VALUATION OF EACH CLASS OF PERSONAL PROPERTY, THE NUMBER OF EACH CLASS OF STOCK AND THE TOTAL VALUE OF SAME WITH TOTAL VALUE OF ALL PERSONAL PROPERTY EXCEPT RAILROADS IN EACH COUNTY WITHIN THE STATE AFTER EQUALIZATION BY THE COUNTY BOARDS OF EQUALIZATION FOR THE YEAR 1900.

COUNTIES.														
	Mortgages, bonds etc.....	Express, street rail- roads gas and elec- tric light comp's ..	Watches, jewelry and plate.....	Furniture and fire arms.....	Musical instruments and sewing ma- chines.....	Libraries .....	Goods, wares and merchandise con- signed goods .....	Fixtures in saloons etc.....	Farming utensils ..	Machinery .....	Wagons, Harness, robes, etc .....			
Beaverhead .....	93,033	.....	\$2,125	\$17,510	\$6,870	\$3,215	161,665	\$32,098	\$4,723	\$19,359	\$34,351			
Broadwater .....	48,561	.....	1,471	17,745	5,447	560	60,231	4,780	7,097	68,830	23,567			
Carbon .....	45,733	750	695	29,720	7,077	2,255	143,876	11,315	14,429	79,981	51,023			
Cascade .....	59,082	104,667	6,493	125,370	21,680	6,655	527,125	43,747	26,335	313,451	78,435			
Choteau .....	59,052	.....	2,013	38,900	5,450	795	174,265	9,475	12,730	16,007	65,385			
Custer .....	25,526	.....	4,051	68,132	12,110	4,910	182,300	20,353	23,895	.....	56,579			
Dawson .....	37,983	.....	1,978	27,313	8,715	385	64,700	5,875	925	9,300	15,250			
Deer Lodge .....	24,910	199,422	2,210	27,905	5,835	4,620	428,766	25,680	12,130	68,890	49,765			
Fergus .....	92,092	.....	1,435	36,245	7,215	2,530	203,360	13,424	11,245	91,505	69,115			
Flathead .....	52,455	29,950	1,580	33,805	7,307	1,770	170,405	7,690	19,945	117,945	41,155			
Gallatin .....	200,395	5,000	3,415	44,515	15,315	7,780	221,025	10,985	39,710	34,575	80,925			
Granite .....	55,781	14,100	1,746	13,808	5,465	2,465	98,157	7,777	4,370	34,285	21,140			
Jefferson .....	37,811	.....	4,240	56,365	13,780	3,140	98,175	10,945	7,208	163,226	35,580			
Lewis and Clarke .....	254,375	538,685	14,505	206,325	28,165	20,695	862,975	65,584	3,885	90,405	62,211			
Madison .....	183,617	4,075	4,465	12,330	14,050	1,745	171,730	7,550	7,550	29,855	68,600			
Meagher .....	219,480	1,100	1,815	20,645	5,270	1,360	81,600	5,185	1,935	16,250	26,730			
Missoula .....	214,071	54,700	5,985	78,123	12,360	6,970	353,943	26,093	6,928	85,002	48,039			
Park .....	36,732	69,487	2,720	48,597	12,035	4,500	241,445	16,765	15,635	63,875	35,620			
Ravalli .....	93,898	19,424	850	19,350	5,450	950	149,735	5,340	5,473	14,290	31,855			
Silver Bow .....	339,235	401,410	15,145	102,830	34,810	42,305	497,665	185,630	4,795	604,485	67,950			
Sweet Grass .....	26,763	3,000	1,030	16,955	5,100	1,995	86,260	7,445	7,669	11,495	19,325			
Teton .....	77,467	.....	410	10,760	1,745	1,290	81,374	3,015	5,345	4,860	23,970			
Valley .....	12,021	.....	3,084	20,010	3,890	1,340	71,698	4,750	821	7,387	17,899			
Yellowstone .....	82,062	50,225	4,897	72,532	14,145	5,340	225,273	27,784	11,846	40,430	36,247			
Total .....	\$2,496,000	\$1,495,905	\$38,358	\$1,205,790	\$259,216	\$120,510	\$6,457,697	\$558,295	\$256,635	\$1,986,148	\$1,080,616			



TABLE NO. 2.—Continued.

COUNTIES.															
No. head of thoroughbreds .....	Value.....	No. head of range cattle.....	Value.....	No. head of mules and common work horses .....	Value.....	No. head of beef ..	Value.....	No. of 1, 2 and 3 year olds and stock cattle.....	Value.....	No. head of cows ..	Value.....	No. head of sheep.	Value.....		
Beaverhead .....	47	\$3,645	\$04,508	2,183	\$54,960	1,680	\$87,200	\$29,614	\$703,697	1,015	\$30,150	115,678	\$317,964		
Broadwater .....	13	1,225	34,935	1,388	50,084	21	665	8,838	214,565	585	17,500	34,505	103,687		
Carbon .....	20	1,700	51,400	2,920	84,455	5	235	16,054	304,215	1,521	45,633	123,650	361,237		
Cascade .....	22	1,800	59,890	4,247	122,676	768	25,690	32,015	720,222	1,000	30,000	162,205	446,534		
Chouteau .....	32	3,165	67,930	3,845	132,440	1,743	52,290	63,500	1,425,464	645	19,385	548,102	1,383,688		
.....	25,229	302,541	5,226	153,400	379	11,370	30,847	716,017	2,409	62,305	338,109	1,010,352	507,381		
Dawson .....	90	9,030	94,446	190,394	1,462	40,352	379	11,370	30,847	716,017	2,409	62,305	338,109		
Deer Lodge .....	53	3,900	3,605	36,050	2,673	70,005	253	8,855	14,846	328,279	1,540	46,200	67,744		
Fergus .....	18	2,050	9,249	92,490	4,971	150,565	.....	8,263	783,665	524	15,720	559,893	1,549,379		
Flathead .....	8	825	1,817	22,985	2,457	62,075	.....	390	191,770	1,448	43,665	190	570		
Gallatin .....	15	1,600	4,702	47,675	4,971	148,005	92	3,185	326,916	2,329	63,135	20,492	60,035		
Granite .....	12	725	2,665	26,665	1,095	33,110	7	205	7,214	1,170	29,355	15,655	39,113		
Jefferson .....	5	550	2,817	28,170	1,406	45,795	111	4,095	9,859	1,154	35,295	6,379	18,890		
Lewis & Clarke .....	10	1,650	3,492	35,155	2,679	73,265	195	7,065	20,053	1,389	41,100	73,370	201,770		
Madison .....	520	37,145	105,880	1,058,800	3,296	106,880	496	20,200	27,203	1,382	42,250	62,989	187,950		
Meagher .....	20	1,450	3,623	34,970	1,777	35,440	242	8,470	505,500	553	17,505	283,545	835,160		
Missoula .....	17	1,800	1,724	17,240	2,497	98	6,040	10,900	248,669	2,172	61,733	3,390	9,990		
Park .....	11	975	2,598	27,594	2,130	63,100	15	600	78,725	1,398	41,790	67,268	187,577		
Ravalli .....	105	20,500	2,094	24,534	2,231	81,190	786	27,510	209,225	2,200	67,800	35,434	97,458		
Silver Bow .....	40	4,300	1,201	12,050	2,522	80,845	197	580	63,000	2,152	60,600	1,251	3,760		
Sweet Grass .....	10	975	1,490	14,900	1,789	41,485	17	6,313	324,314	328	279,038	723,693	723,693		
Teton .....	4	1,650	8,045	80,450	1,881	47,025	246	7,380	414,524	333	8,325	246,261	676,275		
Valley .....	.....	.....	46,480	1,513	42,740	1,210	47,210	137,733	304,937	147	5,145	110,029	308,302		
Yellowstone .....	48	4,290	5,126	52,400	2,058	55,082	35	1,150	557,542	863	25,900	227,185	602,124		
Total .....	1,120	\$104,350	130,470	\$1,476,742	62,880	\$1,863,574	\$307,113	599,662	\$11,817,305	28,650	\$833,636	3,552,081	\$9,818,531		
Average per head for thoroughbred horses.....															
Average per head for range horses.....															
Average per head for mules and common work horses.....															
Average per head for beef.....															
Average per head for yearlings, 1, 2 and 3-year-olds and stock cattle.....															
Average per head for cows.....															
Average per head for sheep.....															

Average per head for thoroughbred horses.....	100
Average per head for range horses .....	100
Average per head for mules and common w.....	100
Average per head for beef .....	100
Average per head for yearlings, 1, 2 and 3.....	100
Average per head for cows .....	100
Average per head for sheep .....	100

TABLE NO. 2.—Concluded.

COUNTIES.										
No. head of hogs ..	Value.....	Hay, grain and wool.....	Lumber, wood and coal.....	Bank stocks, notes, solvent creditors.	Money .....	Net proceeds of mines .....	Any other personal property .....	Total value of all personal property		
Beaverhead .....	328	\$1,534	\$7,256	\$650	\$103,108	\$33,581	\$7,440	\$1,795,122		
Broadwater .....	413	2,463	1,371	54,149	54,149	1,800	17,134	745,277		
Carbon .....	865	5,971	5,800	55,737	55,737	11,225	38,712	1,411,371		
Cascade .....	226	1,130	.....	135,749	135,749	40,770	62,005	3,030,249		
Cascade .....	168	840	.....	164,330	164,330	46,540	6,399	3,689,523		
Choteau .....	219	1,120	1,404	233,380	233,380	37,510	35,935	3,899,679		
Custer .....	18	99	.....	13,374	13,374	7,808	2,922	1,679,492		
Dawson .....	268	1,290	875	29,238	37,540	118,873	70,402	2,011,669		
Deer Lodge .....	562	2,810	1,558	222,387	222,387	2,387	.....	3,352,567		
Fergus .....	985	5,054	22,050	78,995	46,243	2,455	20,331	981,406		
Flathead .....	1,242	7,025	18,555	3,585	40,570	32,322	118,218	1,541,065		
Gallatin .....	185	743	1,773	36,275	12,200	10,897	5,907	618,130		
Granite .....	152	891	475	4,326	60,070	44,734	38,460	950,487		
Jefferson .....	385	1,990	350	11,390	507,289	106,865	113,875	3,797,149		
Lewis and Clarke .....	1,065	6,480	2,055	10,285	267,020	.....	40,035	1,996,807		
Madison .....	127	610	17,390	510	175,375	5,150	33,850	1,882,810		
Meagher .....	947	3,783	17,141	381,878	153,408	22,629	97,921	1,998,656		
Missoula .....	631	3,155	2,045	.....	61,832	22,220	40,973	1,327,998		
Park .....	1,782	6,253	1,396	95,855	36,655	22,135	71,854	1,108,300		
Ravalli .....	493	3,955	2,870	3,380	1,469,665	408,025	256,600	19,582,140		
Silver Bow .....	176	889	500	3,000	51,266	10,000	8,674	1,380,964		
Sweet Grass .....	72	360	.....	.....	17,950	775	2,095	1,467,035		
Teton .....	65	305	.....	895	22,802	.....	1,472	926,214		
Valley .....	316	1,472	410	100	67,456	639	11,277	2,053,625		
Yellowstone .....	.....	.....	.....	.....	.....	.....	.....	.....		
Total .....	11,680	\$60,222	\$116,092	\$670,489	\$4,008,385	\$946,470	\$1,041,208	\$63,227,735		

Average per head for hogs \$5.15

Average per head for hogs \$5.15

TABLE NO. 3.

STATEMENT SHOWING THE TOTAL ASSESSED VALUATION OF ALL PROPERTY IN EACH COUNTY AFTER EQUALIZATION BY STATE AND COUNTY BOARDS OF EQUALIZATION FOR THE YEAR 1900.

COUNTIES.	Total value of real property.....	Total value of all personal property.....	Total value of railroads assessed by State Board of Equalization.....	Total value of all property assessed.....
Beaverhead .....	\$1,741,515	\$1,795,122	\$510,120	\$4,046,757
Broadwater .....	981,646	745,277	247,010	1,973,933
Carbon .....	970,529	1,411,371	292,741	2,674,641
Cascade .....	9,173,448	3,030,249	919,084	13,122,781
Choteau .....	1,181,951	3,689,523	1,442,819	6,314,293
Custer .....	1,726,686	3,899,679	1,055,429	6,681,794
Dawson .....	506,307	1,679,492	363,480	2,549,279
Deer Lodge .....	5,366,710	2,011,669	626,554	8,004,933
Fergus .....	2,006,307	3,358,567	.....	5,358,874
Flathead .....	2,108,905	981,406	1,059,258	4,149,569
Gallatin .....	4,507,964	1,541,065	493,715	6,542,741
Granite .....	1,205,354	618,130	304,746	2,128,230
Jefferson .....	1,883,773	950,487	837,076	3,671,336
Lewis and Clarke .....	10,751,286	3,797,149	703,393	15,251,828
Madison .....	1,827,435	1,996,807	245,164	4,069,406
Meagher .....	1,376,740	1,882,810	56,064	3,315,614
Missoula .....	3,828,223	1,998,656	1,720,398	7,547,277
Park .....	2,113,345	1,327,998	454,036	3,895,379
Ravalli .....	1,654,030	1,108,300	165,165	2,927,495
Silver Bow .....	16,005,890	19,582,140	676,607	36,264,637
Sweet Grass .....	944,745	1,380,964	302,458	2,628,167
Teton .....	761,943	1,467,035	661,060	2,890,038
Valley .....	206,487	926,214	1,081,200	2,213,901
Yellowstone .....	2,342,544	2,053,625	782,519	5,178,688
Total .....	\$75,173,763	\$63,227,735	\$15,000,096	\$153,401,594

TABLE NO. 4.

STATEMENT SHOWING THE AMOUNT OF TAXES DUE BY EACH RAILROAD IN THE STATE UPON THEIR LINES AND BRANCHES.

NAME OF ROAD.	Mileage .....	Tax on railways.....	Tax on depots, round-houses, etc.....	Tax on land, etc.....	Total taxes.....
Northern Pacific Ry Co. and branches ....	1,371.22	\$149,707.98	\$9,459.36	\$51,535.10	\$210,702.44
G. N. Ry Co., Pacific Ext. Mont. Central Ry Co. and branches.....	1,066.02	108,999.12	5,792.63	3,414.98	118,206.73
Oregon Short Line R. R. Co.....	126.41	12,024.65	557.14	.....	12,581.79
Montana R. R. Co.....	70.66	1,793.15	111.54	.....	1,904.69
Great Falls and Canada Ry Co.....	133.9	3,736.76	549.63	79.57	4,365.96
Big Horn Southern Ry Co.....	101.74	7,935.72	705.72	.....	8,641.44
Butte, Anaconda and Pacific Ry and spurs.....	51.258	6,307.33	945.88	53.60	7,306.81
Yellowstone Park Ry Co.....	11.	325.97	.....	.....	325.97
Totals.....	2,932.208	\$290,830.68	18,121.90	\$55,083.25	\$364,035.83

**TABLE NO. 5.**  
STATEMENT SHOWING RATE OF TAXATION LEVIED ON DIFFERENT FUNDS FOR 1900.

COUNTIES.	Total No. of Mills levied . . . . .													
	County Free High School . . . . .	Sinking Fund . . . . .	Bridge Fund . . . . .	Poor Fund . . . . .	Road Fund . . . . .	Bond and Interest Fund . . . . .	School Fund . . . . .	Contingent Fund . . . . .	General Fund . . . . .	Sheep Inspector and Indemnity . . . . .	State Bounty . . . . .	Stock Indemnity . . . . .	Stock Detective and Inspector . . . . .	State . . . . .
Beaverhead . . . . .	1 1/2	1	1 1/2	1 1/2	2	4 1/2	4	8	3 1/2	1 1/2	5	1-16	1 1/2	2 1/2
Broadwater . . . . .	1	1	1	1 1/2	2	5	4	3	5 1/2	1 1/2	5	1-10	1 1/2	2 1/2
Carbon . . . . .	1	1	1	1 1/2	2	5	5	3	5 1/2	1 1/2	5	1-10	1 1/2	2 1/2
Cascade . . . . .	1 1/4	1 1/4	1 1/4	1 1/4	1 3/4	3 1/4	5	2 3/4	5 1/2	1 1/2	5	1-10	1 1/2	2 1/2
Choteau . . . . .	1 1/2	1 1/2	1 1/2	1 1/2	2	4 1/2	4	2 1/2	6 3/4	1 1/2	5	1-10	1 1/2	2 1/2
Custer . . . . .	1 1/2	1 1/2	1 1/2	1 1/2	2	2	5	2 1/2	7 1/2	1 1/2	5	1-10	1 1/2	2 1/2
Dawson . . . . .	1 1/2	1 1/2	1 1/2	1 1/2	2	2	5	3	8	1 1/2	5	1-10	1 1/2	2 1/2
Deer Lodge . . . . .	1 1/2	1 1/2	1 1/2	1 1/2	2	2	5	3	2-5	1 1/2	5	1-10	1 1/2	2 1/2
Fergus . . . . .	1 1/2	1 1/2	1 1/2	1 1/2	2	3 1/2	4	3	4	1 1/2	5	1-10	1 1/2	2 1/2
Flathead . . . . .	1 1/2	1 1/2	1 1/2	1 1/2	2	1 1/2	4	1	3 1/2	1 1/2	5	1-10	1 1/2	2 1/2
Gallatin . . . . .	1 1/2	1 1/2	1 1/2	1 1/2	2	1 1/2	5	3 1/2	11	1 1/2	5	1-10	1 1/2	2 1/2
Granite . . . . .	1 1/2	1 1/2	1 1/2	1 1/2	2	2	5	4 1/2	4	1 1/2	5	1-10	1 1/2	2 1/2
Jefferson . . . . .	1 1/2	1 1/2	1 1/2	1 1/2	2	2	5	4	4	1 1/2	5	1-10	1 1/2	2 1/2
Lewis and Clarke . . . . .	1 1/2	1 1/2	1 1/2	1 1/2	2	2	5	4	4	1 1/2	5	1-10	1 1/2	2 1/2
Madison . . . . .	1 1/2	1 1/2	1 1/2	1 1/2	2	2	5	2	2	1 1/2	5	1-10	1 1/2	2 1/2
Meagher . . . . .	1 1/2	1 1/2	1 1/2	1 1/2	2	2	5	2	2	1 1/2	5	1-10	1 1/2	2 1/2
Missoula . . . . .	1 1/2	1 1/2	1 1/2	1 1/2	2	2	5	3 1/2	5	1 1/2	5	1-10	1 1/2	2 1/2
Park . . . . .	1 1/2	1 1/2	1 1/2	1 1/2	2	2	5	3 1/2	3 1/2	1 1/2	5	1-10	1 1/2	2 1/2
Ravalli . . . . .	1 1/2	1 1/2	1 1/2	1 1/2	2	2	5	3	7	1 1/2	5	1-10	1 1/2	2 1/2
Silver Bow . . . . .	1 1/2	1 1/2	1 1/2	1 1/2	2	2	5	3	5	1 1/2	5	1-10	1 1/2	2 1/2
Sweet Grass . . . . .	1 1/2	1 1/2	1 1/2	1 1/2	2	2	5	3 1/2	4	1 1/2	5	1-10	1 1/2	2 1/2
Teton . . . . .	1 1/2	1 1/2	1 1/2	1 1/2	2	2	5	3	2 1/2	1 1/2	5	1-10	1 1/2	2 1/2
Valley . . . . .	1 1/2	1 1/2	1 1/2	1 1/2	2	1 1/2	4 1/2	2	6	1 1/2	5	1-10	1 1/2	2 1/2
Yellowstone . . . . .	1 1/2	1 1/2	1 1/2	1 1/2	2	1	4 1/2	2	3	1 1/2	5	1-10	1 1/2	2 1/2



## Representative Districts and Apportionment.

Each County is entitled to one Senator.

### COUNTIES.

Beaverhead .....	2
Broadwater .....	2
Carbon .....	1
Cascade .....	5
Choteau .....	2
Custer .....	2
Dawson .....	1
Deer Lodge .....	6
Fergus .....	2
Flathead .....	3
Gallatin .....	3
Granite .....	2
Jefferson .....	3
Lewis and Clarke .....	7
Madison .....	3
Meagher .....	2
Missoula .....	4
Park .....	2
Ravalli .....	2
Silver Bow .....	12
Sweet Grass .....	1
Teton .....	1
Valley .....	1
Yellowstone .....	1
Total .....	70
One Senator from each County .....	24
Total Membership of Seventh Legislative Assembly .....	94

## NATURALIZATION—1898.

STATEMENT SHOWING THE NUMBER AND NATIVITY OF PERSONS TO WHOM FINAL NATURALIZATION PAPERS WERE ISSUED DURING THE CALENDAR YEAR 1898, AS REPORTED BY CLERKS OF THE DISTRICT COURTS.

COUNTIES.		Total..		Per cent of persons naturalized in each county.....		Total..		Per cent of persons naturalized in each county.....	
		1898	1897	1898	1897	1898	1897	1898	1897
Beaverhead .....	1	6	6	.24	1.47	6	6	.24	1.47
Broadwater .....	1	14	14	.56	.49	14	14	.56	.49
Carbon .....	1	18	18	.72	1.72	18	18	.72	1.72
Cascade .....	87	354	354	14.16	11.27	354	354	14.16	11.27
Choteau .....	1	44	44	1.76	3.68	44	44	1.76	3.68
Custer .....	2	40	40	1.60	7.60	40	40	1.60	7.60
Dawson .....	65	5	5	.20	.....	5	5	.20	.....
Deer Lodge .....	1	238	238	9.52	5.88	238	238	9.52	5.88
Fergus .....	1	65	65	2.60	8.58	65	65	2.60	8.58
Flathead .....	4	50	50	2.00	2.30	50	50	2.00	2.30
Gallatin .....	6	36	36	1.44	2.94	36	36	1.44	2.94
Granite .....	3	20	20	.80	1.72	20	20	.80	1.72
Jefferson .....	5	18	18	.72	.....	18	18	.72	.....
Lewis and Clarke .....	11	5	5	.20	7.11	5	5	.20	7.11
Madison .....	1	18	18	.72	4.17	18	18	.72	4.17
Meagher .....	3	2	2	.08	1.72	2	2	.08	1.72
Missoula .....	1	21	21	2.86	2.70	21	21	2.86	2.70
Park .....	27	1	1	.04	2.46	1	1	.04	2.46
Ravalli .....	1	25	25	1.00	2.49	25	25	1.00	2.49
Silver Bow .....	146	7	7	.28	22.78	7	7	.28	22.78
Sweet Grass .....	1	29	29	1.16	3.43	29	29	1.16	3.43
Teton .....	1	31	31	1.24	3.73	31	31	1.24	3.73
Valley .....	3	6	6	.24	1.72	6	6	.24	1.72
Yellowstone .....	1	34	34	1.36	5.15	34	34	1.36	5.15
Total .....	354	2499	2499	100.00	408.100.00	2499	2499	100.00	408.100.00







STATEMENT SHOWING BY COUNTIES AND JUDICIAL DISTRICTS, CIVIL AND CRIMINAL CASES, ADMINISTRATIONS AND GUARDIANSHIPS BEGUN, DISPOSED OF AND PENDING, AND EXECUTIONS, FORECLOSURES AND ORDERS OF SALE ISSUED DURING THE CALENDAR YEAR 1899, AS REPORTED BY CLERKS OF THE DISTRICT COURTS.

COUNTIES	JUDICIAL DISTRICT.																								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
	Lewis and Clarke	Silver Bow	Dover Lodge	Granite	Missoula	Ravalli	Beaverhead	Jefferson	Madison	Park	Carbon	Sweet Grass	Dawson	Custer	Yellowstone	Cascade	Gallatin	Meagher	Broadwater	Chouteau	Fergus	Valley	Flathead	Teton	
Orders of sale during the year.	45	16	9	3	3	3	3	1	1	4	7	4	1	1	3	3	2	2	1	1	3	3	3	4	
Decrees of foreclosure issued during the year	42	17	7	9	9	9	9	2	4	8	7	6	4	1	3	2	2	6	2	2	5	3	3		
Executions issued during the year.	60	94	15	7	8	12	9	9	21	5	4	4	6	4	16	3	48	18	6	2	7	5	3		
Guardianships pending Dec. 31, 1899.	96	117	4	19	8	15	4	17	4	17	29	23	4	6	6	23	39	24	6	6	28	17	15		
Guardianships disposed of during the year.	13	4	6	3	5	6	5	4	1	3	4	2	2	2	12	30	9	10	4	4	2	4	3		
Guardians appointed during 1899.	16	33	6	3	8	2	3	5	3	17	25	22	2	2	7	18	9	5	2	2	28	17	15		
Guardianships pending Dec. 31, 1898.	93	91	17	6	14	6	5	17	4	17	25	22	2	2	11	30	9	10	4	4	28	17	15		
Administrations pending Dec. 31, 1899.	170	267	7	26	32	35	28	27	14	55	69	36	15	8	21	57	83	28	29	21	55	26	13		
Estates settled during the year.	48	57	16	21	21	18	9	28	14	15	18	13	3	3	10	17	30	22	11	15	26	13	13		
Letters of administration issued during 1899.	63	95	30	11	11	18	21	26	11	15	18	13	3	3	10	17	30	22	11	15	26	13	13		
Administrations pending Dec. 31, 1898.	155	228	63	21	26	35	28	27	14	55	69	36	15	8	21	57	83	28	29	21	55	26	13		
Criminal cases pending Dec. 31, 1899.	19	97	2	4	3	3	5	2	27	1	2	4	5	1	7	52	41	42	18	22	12	6	2		
Number of persons tried and acquitted of criminal charges.	2	14	13	4	3	3	5	1	4	1	1	2	2	5	17	20	20	33	14	11	8	2	2		
Criminal cases dismissed, nolle prossed, etc.	11	32	8	10	12	4	3	1	2	5	5	5	4	2	1	10	10	1	1	9	3	2	10		
Commitments to State Insane Asylum.	14	24	2	10	10	5	3	1	1	3	8	3	4	6	3	8	12	12	9	1	5	3	2		
Commitments to State Reform School.	2	9	3	1	1	1	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
Convictions for misdemeanors.	4	5	5	1	1	1	1	2	1	4	4	2	2	3	3	3	4	4	3	1	5	1	1		
Convictions for felonies	16	27	12	9	9	9	3	3	2	2	6	1	2	3	3	9	12	12	3	5	5	1	6		
Criminal cases appealed from lower court	6	32	10	22	7	10	1	1	6	4	2	2	2	3	3	3	9	9	1	1	1	1	1		
Crim. cases begun by indictment and information during 1899.	37	90	30	49	22	40	8	16	7	3	14	1	11	17	17	15	33	39	8	24	9	4	9		
Criminal cases pending Dec. 31, 1898.	11	53	5	9	22	10	8	1	3	4	6	3	3	3	3	39	39	8	5	9	8	4	9		
Criminal cases pending Dec. 31, 1899.	219	1054	73	43	64	79	40	49	61	60	15	2	9	19	38	105	80	20	26	32	25	10	108		
Civil cases disposed of during year 1899.	370	572	173	32	43	64	79	40	49	85	60	26	9	19	67	263	263	9	20	27	21	6	13		
Civil cases begun during calendar year 1899.	281	769	161	48	94	62	79	40	65	89	60	26	9	19	53	263	263	9	20	27	21	6	13		
Civil cases pending Dec. 31, 1898.	299	857	85	27	60	57	34	34	61	56	6	11	12	12	37	189	189	9	27	32	27	10	69		
Total	2123	2446	2032	270	2397	2099	115	472	2215	2246	2354	2397	2446	2446	2446	2446	2446	2446	2446	2446	2446	2446	2446		
Total for 1898.	2032	2470	2397	270	2397	2099	115	472	2215	2246	2354	2397	2446	2446	2446	2446	2446	2446	2446	2446	2446	2446	2446		
Increase and decrease.																									

## DIVO

NUMBER OF DIVORCES GRANTED IN CALENDAR YEARS 1897, 1898 AND 1899  
CENSES ISSUED DURING SAME PERIODS, AS

COUNTIES.	Granted upon com- plaint of wife ...		Granted upon com- plaint of husband		Total number granted.....		Per cent of di- vorces granted in the several coun- ties .....		Marriage Licenses issued during the year .....	
	1897	1898	1897	1898	1897	1898	1897	1898	1897	1898
Beaverhead ... ..	5	3	3	1	8	4	2.72	1.37	42	51
Broadwater ... ..		1				1		.34	7	13
Carbon ... ..	4	1	4	2	8	3	2.72	1.03	44	60
Cascade ... ..	26	31	2	6	34	37	11.56	12.72	200	235
Choteau ... ..		7	1	3	1	10	.34	3.44	50	48
Custer ... ..	5	4	3	2	8	6	2.72	2.06	52	40
Dawson ... ..	4	3	3		7	3	2.38	1.03	17	13
Deer Lodge ... ..	13	12	5	1	18	13	6.12	4.47	157	160
Fergus ... ..	3	3	2		5	3	1.70	1.03	34	47
Flathead ... ..	12	10	12	4	14	14	4.76	4.81	34	66
Gallatin ... ..	3	9	4	4	7	13	2.38	4.47	72	73
Granite ... ..	3	2	1	2	4	4	1.36	1.37	11	19
Jefferson ... ..	1	2	1		2	2	.67	.68	37	22
Lewis and Clarke ... ..	22	20	8	10	30	30	10.20	10.32	178	220
Madison ... ..	4	5		1	4	6	1.36	2.06	37	33
Meagher ... ..	2	1			2	1	.68	.34	15	13
Missoula ... ..	18	12	4	3	22	15	7.49	5.16	80	96
Park ... ..	14	8	1	5	15	13	5.10	4.47	53	65
Ravalli ... ..	6	5	2	2	8	7	2.72	2.41	54	56
Silver Bow ... ..	58	70	19	18	77	88	26.20	30.24	451	530
Sweet Grass ... ..	1	2		1	1	3	.34	1.03	14	24
Teton ... ..	4		3	3	7	3	2.38	1.03	22	17
Valley ... ..		2	2		2	2	.68	.68	16	21
Yellowstone ... ..	6	9	4	1	10	10	3.42	3.44	53	63
Totals ... ..	214	222	80	69	294	291			1730	1984
Per cent ... ..	72.79	76.29	27.21	23.71			100.00	100.00		

## RCES

SHOWN AS COMPLAINT OF WIFE OR HUSBAND, AND MARRIAGE LI-  
REPORTED BY THE CLERKS OF THE DISTRICT COURTS.

Per cent of di- vices granted to the licenses is- sued.....	Per cent of di- vices granted to the licenses is- sued.....	Per cent of di- vices granted to the licenses is- sued.....	Per cent of di- vices granted to the licenses is- sued.....	Per cent of di- vices granted to the licenses is- sued.....	Per cent of di- vices granted to the licenses is- sued.....	Per cent of di- vices granted to the licenses is- sued.....	Per cent of di- vices granted to the licenses is- sued.....	Per cent of di- vices granted to the licenses is- sued.....	Per cent of di- vices granted to the licenses is- sued.....	Per cent of di- vices granted to the licenses is- sued.....	Per cent of di- vices granted to the licenses is- sued.....	Per cent of di- vices granted to the licenses is- sued.....	Per cent of di- vices granted to the licenses is- sued.....
1897	1898	1898	1899	1898	1899	1898	1899	1898	1899	1898	1899	1898	1899
19.06	7.84	3	6	1	1	4	7	1.37	2.08	51	36	7.84	19.44
7.69	1	1	1	1	1	1	2	.34	.60	13	15	7.69	13.33
18.18	5.00	1	12	2	4	3	16	1.03	4.76	60	65	5.00	24.61
17.00	15.74	31	22	6	5	37	27	12.72	8.04	235	229	15.74	11.80
2.00	20.83	7	7	3	1	10	8	3.44	2.38	48	73	20.83	10.96
15.39	15.00	4	6	2	3	6	9	2.06	2.68	40	56	15.00	16.07
41.18	23.08	3	1	1	1	3	1	1.03	.30	13	18	23.08	5.55
11.46	8.13	12	26	1	7	13	33	4.47	9.82	160	148	8.13	22.30
14.70	6.38	3	3	1	2	3	5	1.03	1.49	47	55	6.38	9.09
41.18	21.21	10	5	4	7	14	12	4.81	3.57	66	80	21.21	15.00
9.72	17.81	9	4	4	2	13	6	4.47	1.79	73	84	17.81	7.14
36.36	21.05	2	2	2	1	4	1	1.37	.30	19	24	21.05	4.17
5.41	9.09	2	3	1	2	2	5	.68	1.43	22	26	9.09	19.23
16.85	13.64	20	36	10	9	30	45	10.32	13.39	220	186	13.64	34.20
10.81	18.18	5	7	1	1	6	7	2.06	2.08	33	36	18.18	19.44
13.33	7.69	1	1	1	3	1	4	.34	1.19	13	11	7.69	36.36
27.50	15.79	12	12	3	4	15	16	5.16	4.76	95	109	15.79	14.68
28.30	20.00	8	6	5	2	13	8	4.47	2.38	65	81	20.00	9.88
14.81	12.50	5	5	2	2	7	7	2.41	2.08	56	52	12.50	13.46
17.09	16.60	70	70	18	23	88	93	30.24	27.68	530	529	16.60	17.53
7.14	12.50	2	4	1	1	3	2	1.03	.60	24	23	12.50	8.70
31.81	17.65	2	2	3	1	3	3	1.03	.89	17	31	17.65	9.67
12.30	9.52	2	2	2	2	2	2	.68	.60	21	20	9.52	10.00
18.86	15.87	9	13	1	4	10	17	3.44	5.05	63	86	15.87	19.77
.....	.....	222	252	69	86	291	336	.....	.....	1984	2073	.....	.....
16.99	14.67	76	75.00	23.71	25.00	.....	.....	100.00	100.00	.....	.....	14.67	16.21

## JAIL INCARCERATIONS IN MONTANA, 1898.

Statement showing by counties the number and sex and nature of offense charged against persons confined in the jails of Montana during the calendar year 1898, as reported by sheriffs; also showing the increase or decrease as compared with the year 1897, and the per cent of incarcerations in each county to the total incarcerations in the state for 1898.

COUNTIES.	White.			Colored.			Indians.			Total Confined During the Year.	Days Confined.		Off. Charg'd		Witnesses Held	Insane Temporarily in Custody of Sheriff...	Per Cent. of Incarcerations for each County to the Total Incarcerations in State, 1898.	Paupers fed and lodged over Night, Sick, etc.
	Male	Female	Total	Male	Female	Total	Male	Female	Total		Average No. Days Each Confined.	Total No. Days all Confined.	Misdemeanors.	Held Over Felonies for Action of District Court.				
Beaverhead	54	1	55	1	1	2	1	1	2	56	1,596	28.5	49	7	28	1	1.28	.....
Broadwater	13	1	14	1	1	2	1	1	2	14	65	4.7	6	4	10	4	.32	.....
* Carbon	172	14	186	5	3	8	8	4	12	194	5,161	26.6	161	20	10	3	4.42	.....
Cascade	98	2	100	2	2	4	***4	4	8	108	2,325	21.5	56	26	8	3	2.46	18
Choteau	74	8	82	2	2	4	2	2	4	84	1,260	15.0	45	32	7	7	1.91	.....
Custer	7	1	8	1	1	2	1	1	2	7	196	28.0	4	3	3	.....	.16	.....
Dawson	385	17	402	12	12	24	12	12	24	414	11,440	27.6	355	34	4	21	9.44	.....
Deer Lodge	79	4	83	1	1	2	1	1	2	80	.....	.....	61	15	4	1	1.82	.....
Fergus	295	4	299	3	3	6	39	8	47	346	4,313	12.4	310	33	2	1	7.89	.....
Flathead	60	2	62	3	3	6	3	3	6	65	1,568	24.1	38	23	4	4	1.48	.....
Gallatin	21	2	23	.....	.....	.....	.....	.....	.....	23	349	15.2	5	11	1	6	.52	.....
Granite	78	3	81	2	2	4	2	2	4	83	1,545	18.6	69	11	3	3	1.91	.....
Jefferson	250	12	262	10	4	14	2	2	4	278	7,918	28.5	178	71	3	26	6.34	.....
Lewis and Clarke	26	2	28	1	1	2	1	1	2	29	1,624	56.0	10	14	5	5	.66	.....
Madison	27	2	29	2	2	4	2	2	4	29	566	19.5	26	22	3	3	.66	.....
Meagher	661	16	677	10	7	17	25	3	28	722	6,105	8.5	692	22	2	6	16.46	.....
Missoula	164	1	165	1	2	3	1	1	2	168	2,124	12.6	148	14	3	3	3.83	.....
Park	20	1	21	1	1	2	1	1	2	21	378	18.0	14	6	2	2	.48	.....
Ravalli	1073	241	1314	136	45	181	9	9	18	1504	28,576	19.1	953	293	72	121	34.29	***65
Silver Bow	17	1	18	.....	.....	.....	.....	.....	.....	18	285	15.8	11	3	1	3	.41	.....
Sweet Grass	24	1	25	.....	.....	.....	5	3	8	33	395	28.4	24	8	1	.....	.75	.....
Teton	19	.....	19	.....	.....	.....	***1	1	2	20	1,015	50.8	18	2	.....	.....	.46	.....
Valley	78	2	80	6	6	12	4	4	8	90	2,050	22.8	82	1	1	7	2.05	.....
Yellowstone	3695	329	4024	194	63	257	91	14	105	4,386	81,395	18.56	3315	652	128	238	100.00	83
Total	3328	227	3555	213	54	267	65	11	76	3898	74,070	18.99	3019	573	79	244	99.99	.....
Total for year 1897	367	102	469	19	9	28	26	3	29	488	7,215	.43	296	79	49	6	.....	.....
Increase or decrease	84.23	7.50	91.73	4.43	1.44	5.87	2.08	.32	2.40	.....	.....	.....	.....	.....	.....	.....	.....	.....
Per cent of total incarceration, 1898.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

Per cent of increase of total incarcerations over the year 1897, 12.52.

\* Court House Burned—Records Destroyed.

\*\*\* Chinese

\*\*\* Half breeds,

\*\*\*Sick.



## JAIL INCARCERATIONS IN MONTANA, 1899.

Statement showing by counties the number and sex and nature of offense charged against persons confined in the jails of Montana during the calendar year 1899, as reported by sheriffs; also showing the increase or decrease as compared with the year 1898, and the per cent of incarcerations in each county to the total incarcerations in the state for 1899.

COUNTIES.	White.			Colored.			Indians.			Total Confined During the Year.....		Days (continued)		Off. Chgd.		Witnesses Held.....	Insane Temporarily in Custody of Sheriff...	Per Cent. of Incarcerations for each County to the Total Incarcerations in State, 1899.	Lodged and Fed.....
	Total.....			Total.....			Total.....			Total No. Days all Confined.....	Average No. Days Each Confined...	Misdemeanors .....	Held Over Felonies for Action of District Court ..	Misdemeanors .....	Held Over Felonies for Action of District Court ..	Witnesses Held.....	Insane Temporarily in Custody of Sheriff...	Per Cent. of Incarcerations for each County to the Total Incarcerations in State, 1899.	Lodged and Fed.....
	Male.....	Female.....	Total.....	Male.....	Female.....	Total.....	Male.....	Female.....	Total.....										
Beaverhead .....	42	1	4	.....	.....	.....	.....	.....	.....	47	21.6	29	17	.....	.....	.....	1	1.02	.....
Broadwater .....	9	.....	9	.....	.....	.....	.....	.....	.....	9	25.7	2	2	.....	.....	.....	5	.20	.....
Carbon .....	15	.....	15	.....	.....	.....	.....	.....	.....	15	61.0	7	7	.....	.....	.....	1	.33	.....
Cascade .....	163	10	173	.....	.....	.....	.....	.....	.....	178	32.3	129	26	.....	.....	.....	15	3.88	.....
Choteau .....	113	3	116	.....	.....	.....	.....	.....	.....	124	14.0	75	21	.....	.....	.....	2	2.69	25
Custer .....	42	.....	42	.....	.....	.....	.....	.....	.....	46	1.165	20	22	.....	.....	.....	1	1.00	.....
Dawson .....	10	.....	10	.....	.....	.....	.....	.....	.....	14	60.2	4	.....	.....	.....	.....	1	.30	.....
Deer Lodge.. ..	401	40	441	.....	.....	.....	.....	.....	.....	464	25.1	397	39	.....	.....	.....	20	10.10	.....
Fergus .....	74	1	75	.....	.....	.....	.....	.....	.....	80	26.7	67	11	.....	.....	.....	2	1.74	.....
Flathead .....	447	6	453	.....	.....	.....	.....	.....	.....	485	8.2	440	36	.....	.....	.....	8	10.66	.....
Gallatin .....	52	.....	52	.....	.....	.....	.....	.....	.....	56	20.0	29	19	.....	.....	.....	7	1.22	.....
Granite .....	28	3	31	.....	.....	.....	.....	.....	.....	32	77.8	10	10	.....	.....	.....	10	.70	.....
Jefferson .....	55	.....	55	.....	.....	.....	.....	.....	.....	56	16.0	47	5	.....	.....	.....	4	1.22	.....
Lewis and Clarke ..	204	24	228	.....	.....	.....	.....	.....	.....	254	30.5	143	81	.....	.....	.....	24	5.53	.....
Madison .....	16	1	17	.....	.....	.....	.....	.....	.....	17	67.6	6	8	.....	.....	.....	3	.37	.....
Mcagher .....	18	.....	18	.....	.....	.....	.....	.....	.....	18	1.14	.....	.....	.....	.....	.....	2	.39	.....
Missoula .....	625	10	635	.....	.....	.....	.....	.....	.....	701	14.6	673	18	.....	.....	.....	10	15.26	.....
Park .....	338	6	344	.....	.....	.....	.....	.....	.....	4780	13.7	318	17	.....	.....	.....	11	7.58	.....
Ravalli .....	140	2	142	.....	.....	.....	.....	.....	.....	146	8.6	128	6	.....	.....	.....	11	3.16	.....
Silver Bow .....	918	193	1111	.....	.....	.....	.....	.....	.....	1259	20.5	840	222	.....	.....	.....	98	27.41	55
Sweet Grass .....	41	1	42	.....	.....	.....	.....	.....	.....	46	51.3	36	8	.....	.....	.....	2	1.00	.....
Teton .....	33	1	34	.....	.....	.....	.....	.....	.....	44	11.2	32	9	.....	.....	.....	1	.96	.....
Valley .....	64	.....	64	.....	.....	.....	.....	.....	.....	65	26.3	52	11	.....	.....	.....	2	1.42	.....
Yellowstone .....	82	1	83	.....	.....	.....	.....	.....	.....	90	22.1	59	20	.....	.....	.....	11	1.96	.....
Total .....	3930	303	4233	189	53	242	104	14	118	4593	18.59	3361	612	74	253	100.00	81	.....	.....
Total for 1898 .....	3695	329	4024	194	63	257	91	14	105	4386	18.56	3315	652	128	238	.....	83	.....	.....
Increase or decrease ..	235	16	251	.....	.....	.....	.....	.....	.....	207	.03	246	40	54	15	.....	2	.....	.....
Per cent of total incarcerations, 1899 ..	86.56	6.00	92.56	4.12	1.15	5.27	2.26	.31	2.57	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

Per cent of increase of total incarcerations over the year 1898, 4.72.

## PENITENTIARY

STATEMENT SHOWING BY COUNTIES, THE OFFENCES FOR WHICH PRIS  
LODGE DURING THE

CRIME FOR WHICH CONVICTED.	Beaverhead	Broadwater	Carbon	Cascade	Choteau	Custer	Dawson
Abortion .....							
Assault 1st degree.....						1	
Assault 2nd degree....			3		1		
Burglary 1st degree .....				3	1		
Burglary 2nd degree..	3					4	
Embezzlement .....							
Escaping from State Prison .....							
Forgery .....				1	1	3	
Grand Larceny .....				5	3	7	3
Grand Larceny attempt to commit .....							
Injuring Public Jail .....							
Mayhem .....							
Manslaughter.....							
Misappropriating of Bank Funds .....						4	
Murder in 2nd degree .....							
Perjury .....							
Petit Larceny, 2nd conviction .....					1		
Prizefighting .....							
Rape .....						1	
Rape attempt to commit .....							
Robbery .....							
Secreting Public Record .....							
Sodomy .....							
Receiving Stolen Property .....							
Total commitments 1898 .....	3		3	9	7	20	3
On hand December 31st 1897 .....	11	1	5	28	20	21	2
Total .....	14	1	8	37	27	41	5
Discharged 1898, term expired .....			2	1	3	7	
Discharged during 1898, diminution of sent.	1	1		10	8	10	
Discharged during 1898, pardon .....	2			3		2	
Discharged during 1898, order of court ....				1			
Escaped .....					1		
Died .....	1						
Total discharged, etc .....	4	1	2	15	12	19	
Total number of prisoners, Dec. 31st, 1898..	10		6	22	15	22	5
Percentage of commitments, each county, 1898.....	1.52		1.52	4.56	3.55	10.15	1.52

Note.—372, given in above report as the total number of prisoners on hand at December 31st, 1898, should be 368. The seeming discrepancy is caused by erroneously including 4 United States prisoners in the report for the previous year (1897.)

# INCARCERATIONS.

ONERS WERE COMMITTED TO THE MONTANA STATE PRISON, AT DEER  
CALENDAR YEAR 1898.

Deer Lodge .....	Fergus .....	Flathead .....	Gallatin .....	Granite .....	Jefferson .....	Lewis and Clarke ..	Madison .....	Meagher .....	Missoula .....	Park .....	Ravalli .....	Silver Bow .....	Sweet Grass .....	Teton .....	Valley .....	Yellowstone .....	Total .....	Percentage of con- victions during 1898 classified by crime.
1					1	1											5	2.54
2	1	1	1				1		1		1	2	2				15	7.61
6		8	2			1			3		4	1				4	33	16.75
1		1			1	5			1		1	1	1		1	2	22	11.16
6																	6	3.05
3	1					3	2		3	1	1	3			4	3	56	28.43
8	2	7	2	1	1	1	1	1	1	1		4			1	1	22	11.16
		1															1	.51
			1					1								1	3	1.52
												1					1	.51
					1		1					1		1			4	2.04
1						1	1		1	2	1				1		12	6.09
1																	2	1.01
1																	1	.51
1												1					3	1.52
1																1	1	.51
1									2			1	2			1	7	3.55
						1											1	.51
1																	1	.51
												1					1	.51
33	4	18	6	1	4	13	6	1	12	4	4	19	6	3	5	13	197	100.00
34	3	10	11	6	10	51	11	2	25	8	3	55	7	3	4	17	348	.....
67	7	28	17	7	14	64	17	3	37	12	7	74	13	6	9	30	545	.....
6		2	2		1	3			1			2			2	1	33	.....
9		3	4	2	8	6		1	6	2	2	17	2	1	2	6	101	.....
1		1		1		5	7	1	2	1		2					28	.....
3						1					1						4	.....
1			1														4	.....
19	1	6	7	3	9	15	7	2	9	4	2	22	2	1	4	7	173	.....
48	6	22	10	4	5	49	10	1	28	8	5	52	11	5	5	23	372	.....
16.75	2.04	9.14	3.04	.51	2.04	6.60	3.04	.51	6.09	2.04	2.04	9.64	3.04	1.52	2.54	6.60	100.00	.....

STATEMENT SHOWING BY COUNTIES THE OFFENCES FOR WHICH PRIS  
CALENDAR

CRIME FOR WHICH CONVICTED.	Beaverhead .....	Broadwater .....	Cerib .....	Cascade .....	Chouteau .....	Custer .....	Dawson .....
Abortion .....							
Assault, 1st degree.....					1		
Assault, 2nd degree.....				1			1
Burglary, 1st degree.....				1	2	1	
Burglary, 2nd degree .....				1			
Destroying Registered Letter .....							
Embezzlement .....							
Forgery .....				3	7		
Grand Larceny .....				3	1	1	
Gambling .....							
Injuring Public Jail .....	2						
Manslaughter .....				1		1	
Murder, 2nd degree.....					2		
Mailing Obscene Letter .....							
Misappropriation of Bank Funds .....							
Perjury .....						1	
Petit Larceny, 2nd conviction .....				2			
Robbery .....					1		
Uttering Fictitious Check .....							
Receiving Stolen Property .....							
Mayhem .....							
Rape .....	1						
Sodomy .....							
Having Counterfeit Coin in Possession .....							
Bigamy.....							
Arson, 2nd degree .....							
Branding with intent to steal .....	2						
Assault with corrosive chemicals .....							
Total commitments during year 1899..	5			12	15	3	1
On hand December 31st, 1898.....							
Total .....							
Discharged during 1899, term expired .....	2		1	5	3	3	
Discharged during 1899, diminution of sent.	2		3	6	4	5	1
Discharged during 1899, pardon .....					1		
Discharged during 1899, order of court.....						2	
Escaped .....							
Died .....						1	
Insane, removed to State Asylum .....							
Total died, discharged, pardoned, escaped, etc .....	4		4	11	8	11	1
Total number of prisoners in confinement December 31st, 1899 .....							
Per centage of commitments from each County during 1899 .....	3.38			8.11	10.13	2.03	.67



ONERS WERE COMMITTED TO MONTANA STATE PRISON DURING THE  
YEAR 1899.

	Deer Lodge .....	Fergus .....	Flathead .....	Gallatin .....	Granite .....	Jefferson .....	Lewis and Clarke ..	Madison .....	Meagher .....	Missoula .....	Park .....	Ravalli .....	Silver Bow .....	Sweet Grass .....	Teton .....	Valley .....	Yellowstone .....	Total .....	Percentage of con- victions during 1899 classified by crime.
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	9	6.08
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	12	8.11
3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	21	14.19
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	10	6.76
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	19	12.84
3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	29	19.60
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1.35
3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	12	8.11
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	8	5.41
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	2.03
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1.35
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	9	6.08
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1.35
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1.35
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	.67
2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	2.03
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	.67
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1.35
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	.67
14	5	9	4	2	13	3	9	7	5	29	3	3	6	148	100.00				
7	5	2	4	2	4	2	6	1	10	2	1	6	60						
9	4	3	2	8	2	2	7	1	20	5	4	5	101						
2	1	2	3	1	3	1	2	1	1	1	1	1	10						
1	1	1	1	1	1	1	1	1	1	1	1	1	1						
18	4	12	5	3	2	16	4	2	13	3	2	31	7	5	12	178			
9.46	3.38	6.08	2.70	1.35	8.78	2.03	6.08	4.73	3.38	19.60	2.03	2.03	4.05	100.00					

## INSANE ASYLUM

## REPORT OF COMMITMENTS

COUNTIES.	Primary Mental Deterioration.....	Alcoholic Dementia	Chronic Confusional Insanity.....	Chronic Delusional Insanity.....	Epilepsy.....	Epileptic Dementia	Furo.....	Hysterical Insanity	Insanity of Puber- lence.....	Idiocy.....
Beaverhead .....	1			1						
Broadwater .....	1				1					
Carbon .....	1									
Cascade .....	1				1					
Choteau .....	1				1					
Custer .....	2									
Dawson .....										
Deer Lodge .....	3						1			
Fergus .....										
Flathead .....	1			1						
Gallatin .....	1									
Granite .....										
Jefferson .....	2				1					
Lewis and Clarke ..	5							1		
Madison .....	1									
Meagher .....	1				1					
Missoula.....				1						1
Park .....	1				1					
Ravalli .....				1						
Silver Bow .....	3		1		2					1
Sweet Grass .....				1						
Teton .....										
Valley .....										
Yellowstone .....					1					
Total during year .....	24	1	5	9	1	1	2	2		
Number of inmates Dec. 31, 1897 .....	36	8	25	83	9	6	1		23	
Grand Total .....	60	8	26	88	18	6	2	1	2	25
Number discharged in 1898 .....	11			3	1	2				
Number died during 1898 .....	1		1	3						1
Number escaped during 1898 .....			3	1						
Total discharged, died and escaped 1898..	12	1	3	7	1	2				1
Total Number of inmates Dec. 31, 1898.....	6	8	26	88		6	2	1	2	25



## REPORT OF COMMITMENTS

COUNTIES.	Mania. Primary Deterioration	Melancholia	Primary Dementia	Secondary Dementia	Primary Confusional Insanity	Terminal Dementia	Secondary Confusional Insanity	Chronic Confusional Insanity	Primary Delusional Insanity	Secondary Delusional Insanity	Chronic Delusional Insanity
Beaverhead .....						1					1
Broadwater .....	1	1	3								
Carbon .....									2		
Cascade .....	1		1						3		
Choteau .....											
Custer .....	13	1							1		1
Dawson .....	1										
Deer Lodge .....	5	1	2						4		
Fergus .....		1	2								
Flathead .....	1		2								1
Gallatin .....	12								1		
Granite .....	1		2								
Jefferson .....									1		1
Lewis and Clarke .....	2	1	3						6		
Madison .....			1								1
Meagher .....											
Missoula .....	1	1	1	1					1		2
Park .....	1		5						2		
Ravalli .....	12		1						3		
Silver Bow .....	2	4	4						8	1	1
Sweet Grass .....		1	2						1		1
Teton .....	2								1		
Valley .....											
Yellowstone .....	2		1						3		1
Blackfeet Indian Reservation..		1									
State Penitentiary .....									1		
United States Penitentiary .....											
Total committed during year 1899, classified by disease .....	26	12	30	1		1			37	1	10
Total in Asylum Dec. 31, 1898, classified by disease .....	4	7	74	2	17	15		25	47	26	129
Total .....	30	19	104	3	17	16		25	84	27	139
No. discharged during 1899, classified by disease .....	14	6	19	1				1	15	1	5
No. escaped during 1899, classified by disease .....	2		3						6		2
No. died during 1899, classified by disease .....	2	6	3		3	7			1		3
Total number discharged, died, and escaped, 1899 .....	18	12	25	1	3	7		1	22	1	10
Total number of patients in asylum Dec. 31, 1899, classified by disease..	12	7	79	2	14	9		24	62	26	129



## AT THE INSANE ASYLUM FOR 1899.

Total No. each Co. in Asylum 1899.	Number Escaped 1899.	Number Died 1899.	Number Discharged Improved, 1899.	Number Discharged Recovered 1899.	Per cent Patients from respective counties 1899.	Total Committed during year 1899.	Not Insane	Idiocy	Imbecility	Senile Dementia	Hysterical Insanity	Paralytic Dementia	Syphilitic Dementia	Alcoholic Dementia	Stuporous	Homicidal Insanity	Traumatic Insanity	Periodical Insanity	Epileptic	Paranoia
21	1	1	1	1	2.10	3				1										
2	1				3.50	5														
3					2.10	3		1												
23	4	2	2	2	4.20	6					1									
13	2				.69	1														
15	2	1	1	2	4.20	6				1										
3					.69	1														
63	3	5	4	1	10.48	15		1		1										
11	1				2.80	4														
6					2.80	4														
21	3	3			2.80	4														
7		1	1		2.80	4														
17		1	1		1.40	2														
62	2	4	2		10.48	15				1										
10	1				1.40	2														
14																				
47	1	1	1		7.00	10		2												
14	2				5.60	8														
6	1				5.60	8														
90	5	3	3	1	18.18	26		2				1								
7		2			2.80	4														
5	1	1			2.10	3														
1																				
14	1	2	1		4.90	7														
1					.69	1														
1					.69	1														
2																				
481	13	36	22	51	100.00	143	1	6	2	3	3	1							8	1
						460		37	8	5	2	2	1	6	5			1	35	12
						603	1	43	10	8	5	3	1	6	5			1	43	13
						73		1		1	1	1		1				3		1
						13														
						36				6				1				3		
						122	1	1		7	1	2		2	1			1	6	1
						481	1	42	10	1	4	1	1	4	4			0	37	12

# OFFICIAL DIRECTORY.

## CONGRESSIONAL DELEGATION.

Office.	Name.	Residence.	Term Expires.
United States Senator .....	W. A. Clark .....	Butte . . . . .	March 3, 1907.
Representative in Congress ..	Caldwell Edwards ..	Bozeman.. . . .	March 3, 1903.

\*Elected to succeed T. H. Carter.

## Officers and Members of the Seventh Legislative Assembly.

Regular Sessions Convene at 12 o'clock on the first Monday in January, each odd numbered year.—Limit of Session 60 Days.

Governor .... J. K. TOOLE.

Lieutenant-Governor and President of the Senate .... FRANK G. HIGGINS.

## MEMBERS OF THE SENATE OF THE SEVENTH LEGISLATIVE ASSEMBLY.

Counties.	Name	Politics	Address	Elected	Term Office
Beaverhead .....	James P. Murray	Democrat.....	Dillon .....	Nov. 6, 1900	4 years
Broadwater .....	W. E. Tierney ...	Democrat.....	Townsend ...	Nov. 8, 1898	4 years
Carbon .....	W. F. Meyer .....	Republican.....	Red Lodge ...	Nov. 6, 1900	4 years
Cascade .....	Geo. H. Stanton ...	Democrat.....	Great Falls ...	Nov. 8, 1898	4 years
Choteau .....	B. D. Phillips....	Republican.....	Phillips .....	Nov. 8, 1898	4 years
Custer.. .....	Kenneth McLean	Republican.....	Miles City ....	Nov. 6, 1900	4 years
Dawson .....	Thos. P. Cullen..	Democrat.....	Glendive .....	Nov. 6, 1900	4 years
Deer Lodge .....	J. M. Kennedy ..	Democrat.....	Anaconda ....	Nov. 6, 1900	4 years
Fergus .....	S. S. Hobson ....	Republican.....	Lewistown .....	Nov. 6, 1900	4 years
Flathead .....	J. H. Geiger ....	Republican.....	Libby .....	Nov. 8, 1898	4 years
Galatin .....	C. W. Hoffman ..	Democrat.....	Bozeman .....	Nov. 6, 1900	4 years
Granite .....	Jerry Connolly ..	Populist.....	Garnet .....	Nov. 8, 1898	4 years
Jefferson .....	D. G. Warner.....	Democrat.....	Boulder .....	Nov. 8, 1898	4 years
Lewis and Clarke	W. M. Biggs ....	Democrat.....	Helena .....	Nov. 6, 1900	4 years
Madison .....	W. A. Clark .....	Democrat.....	Virginia City ...	Nov. 8, 1898	4 years
Meagher .....	E. J. Anderson ..	Republican.....	White Sul. Springs...	Nov. 6, 1900	2 years
Missoula .....	Tyler Worden ...	Republican.....	Missoula .....	Nov. 8, 1898	4 years
Park .....	J. M. Conrow ...	Democrat.....	Livingston ....	Nov. 6, 1900	4 years
Ravalli .....	H. L. Myers .....	Democrat.....	Hamilton .....	Nov. 8, 1898	4 years
Silver Bow .....	T. F. Courtney ...	Democrat.....	Butte .....	Nov. 8, 1898	4 years
Sweet Grass .....	J. N. Kelley ....	Republican.....	Hunters Hot Springs.	Nov. 6, 1900	4 years
Teton .....	S. L. Mitchell....	Republican.....	Choteau .....	Nov. 8, 1898	4 years
Valley .....	A. W. Mahon ....	Democrat.....	Glasgow .....	Nov. 8, 1898	4 years
Yellowstone .....	C. O. Greuwell ...	Democrat.....	Billings .....	Nov. 8, 1898	4 years

## HOUSE OF REPRESENTATIVES.

Counties.	Name.	Politics.	Address.	Term Office
Beaverhead .....	D. E. Metlen .....	Democrat...	Dillon.....	2 years
	Emerson Hill .....	Democrat...	Red Rock .....	2 years
Broadwater... ..	Lloyd Cannon .....	Democrat...	Winston .....	2 years
	A. B. Rossman .....	Democrat...	Radersburg...	2 years
Carbon .....	C. H. Gregory .....	Republican..	Gebo .....	2 years
Cascade.....	R. P. Thoroughman ..	Democrat...	Cascade .....	2 years
	George R. Wood.....	Democrat...	Great Falls .....	2 years
	Thos. F. Richardson ...	Populist.....	Great Falls .....	2 years
	Chas. H. Connor.....	Labor.....	Belt .....	2 years
	S. R. Jensen.....	Populist.....	Great Falls .....	2 years
Choteau.....	Jno. F. Patterson.....	Republican..	Fort Benton .....	2 years
	George R. Bourne.....	Republican..	Hill .....	2 years
Custer .....	E. S. Becker.....	Republican..	Forsyth.....	2 years
	C. D. Newbury.....	Republican..	Ekalaka .....	2 years
Dawson .....	George McCone.....	Republican..	Tonka .....	2 years
Deer Lodge .....	John R. Toole.....	Ind. Dem....	Anaconda .....	2 years
	John M. Madden.....	Ind. Dem....	Anaconda .....	2 years
	James E. McDonnell....	Ind. Dem....	Anaconda .....	2 years
	Michael Geary .....	Ind. Dem....	Helmville.....	2 years
	Thos. McTague .....	Ind. Dem....	Deer Lodge .....	2 years
	Jno. Bielenberg .....	Republican..	Deer Lodge .....	2 years
Fergus .....	Wyllys Hedges.....	Republican..	Yale.....	2 years
	Alex B. Lehman .....	Republican..	Lewistown .....	2 years
Flathead .....	W. G. Fitzpatrick.....	Democrat...	Columbia Falls .....	2 years
	B. J. McIntyre.....	Republican..	Kalispell .....	2 years
	L. H. Faust.....	Republican..	Libby .....	2 years
Gallatin .....	James E. Martin .....	Democrat...	Bozeman .....	2 years
	W. A. Roland.....	Republican..	Logan .....	2 years
	Wesley C. Newton.....	Republican..	Bozeman .....	2 years
Granite .....	Thomas F. Ward.....	Democrat...	Garnet .....	2 years
	Henry Lewney .....	Populist.....	Granite .....	2 years
Jefferson .....	John Berkin.....	Democrat...	Boulder .....	2 years
	Archibald R. McDonald	Democrat...	Whitehall .....	2 years
	Joseph B. Brien.....	Democrat...	Basin .....	2 years
Lewis and Clarke	John Baker .....	Democrat...	Helena .....	2 years
	Wm. J. Hartwig.....	Democrat...	Helena .....	2 years
	John H. Urquhart.....	Democrat...	Helena .....	2 years
	Herbert L. Cram.....	Democrat...	Helena .....	2 years
	Timothy D. Sullivan...	Democrat...	Marysville.....	2 years
	Frank H. Donaldson...	Democrat...	East Helena .....	2 years
	Fred S. Sanden.....	Populist.....	Helena .....	2 years
Madison .....	B. J. Fine.....	Democrat...	Virginia City .....	2 years
	G. F. White.....	Democrat...	Virginia City .....	2 years
	Eli Adkins.....	Democrat...	Virginia City .....	2 years
Meagher .....	Charles L. Murray.....	Republican..	White Sulphur Springs .....	2 years
	Nathan Godfrey .....	Republican..	Two Dot .....	2 years
Missoula.....	William Crawford .....	Labor.....	Clinton .....	2 years
	Thomas H. Pendergrass	Labor.....	Lo Lo .....	2 years
	Joseph M. Dixon .....	Republican..	Missoula .....	2 years
	Edward Donlan .....	Republican..	Frenchtown .....	2 years
Park .....	Benjamin F. Myers .....	Democrat...	Livingston .....	2 years
	Thos. M. Swindlehurst	Democrat...	Livingston .....	2 years
Ravalli .....	George T. Baggs .....	Republican..	Stevensville .....	2 years
	Aaron Connor.....	Republican..	Darby .....	2 years
Silver Bow .....	F. E. Corbett.....	Democrat...	Butte .....	2 years
	John MacGinniss.....	Democrat...	Butte .....	2 years
	Thos. S. Kilgallon.....	Democrat...	Butte .....	2 years
	M. P. Gilchrist.....	Democrat...	Butte .....	2 years
	Joseph Meunier.....	Democrat...	Butte .....	2 years
	Barney Ferry .....	Populist.....	Butte .....	2 years
	Frank J. Pelletier.....	Labor.....	Butte .....	2 years
	F. B. Axtell.....	Labor.....	Butte .....	2 years
	Martin Dee, Jr.....	Labor.....	Butte .....	2 years
	J. J. Quinn.....	Labor.....	Butte .....	2 years
	Chas. Lannin.....	Labor.....	Butte .....	2 years
	P. J. Sullivan.....	Populist.....	Butte .....	2 years
Sweet Grass .....	Robert Brownlee.....	Republican..	Melville .....	2 years
Teton .....	Wm. D. Jones .....	Republican..	Dupuyer .....	2 years
Valley .....	Walter Shanley .....	Republican..	Glasgow .....	2 years
Yellowstone .....	George C. Stull .....	Republican..	Billings .....	2 years

## SEVENTH ANNUAL REPORT OF BUREAU

## OFFICIAL ROSTER OF THE SENATE.

Office.	Name of Officers.	County Resident of.
President .....	Frank G. Higgins ..	Missoula.
President pro tempore.....	George H. Stanton ..	Cascade.
Secretary .....	C. A. Whipple .....	Broadwater.
Assitant Secretary .....	E. B. Largent .....	Cascade.
Sergeant-at-Arms .....	James Jobb .....	Meagher.
Assistant Sergeant-at-Arms .....	W. H. McCann .....	Lewis and Clarke.
Journal Clerk .....	D. Wortham .....	Silver Bow.
Engrossing Clerk... ..	X. K. Stout .....	Flathead.
Enrolling Clerk .....	Alfred Hillman ....	Dawson.
Chaplain .....	Rev. I. N. Smith..	Lewis and Clarke.
Doorkeeper .....	N. J. Myers .....	Missoula.
Assistant Doorkeeper .....	David Johnson ....	Park.

## OFFICIAL ROSTER OF THE HOUSE.

Office.	Name of Officer.	County Resident of.
Speaker .....	F. E. Corbett .....	Silver Bow.
Speaker pro tempore .....	John Baker .....	Lewis and Clarke.
Chief Clerk .....	Roger E. Skelly .....	Lewis and Clarke.
Assitant Chief Clerk .....	John S. Wyman .....	Missoula.
Journal Clerk .....	R. J. Dee .....	Deer Lodge.
Enrolling Clerk .....	Miss Nettle Kirkendall .....	Lewis and Clarke.
Engrossing Clerk .....	Joseph Gehrett .....	Broadwater.
Chaplain .....	Rev. D. B. Price .....	Lewis and Clarke.
Sergeant-at-Arms .....	Daniel McKay .....	Cascade.
Assistant Sergeant-at-Arms .....	Thomas Stanton .....	Silver Bow.
Doorkeeper .....	T. S. Woodford .....	Missoula.

## LIST OF STATE OFFICIALS STATE OF MONTANA.

Office.	Name of Officer.	Residence.
Governor .....	J. K. Toole .....	Helena, Mont.
Lieutenant Governor .....	Frank G. Higgins .....	Missoula, Mont.
Secretary of State .....	George M. Hays .....	Billings, Mont.
State Treasurer .....	A. H. Barret .....	Butte, Mont.
Attorney General .....	James Donovan .....	Great Falls, Mont.
State Auditor .....	J. H. Calderhead .....	Helena, Mont.
Sup't. of Public Instruction .....	W. W. Welch .....	Billings, Mont.

## SUPREME COURT, STATE OF MONTANA.

Office.	Name.	P. O. Address.	Elected.	Term Expires.
Chief Justice.....	Theodore H. Brantley .....	Helena ... ..	Nov. 8, 1898	Jan. 2, 1905
Associate Justice.....	Geo. R. Milburn.....	Miles City ..	Nov. 6, 1900	Jan. 7, 1907
Associate Justice.....	*W. T. Pigott.....	Helena .....	Nov. 8, 1898	Jan. 2, 1903

\*Elected to fill vacancy caused by death of Associate Justice Horace R. Buck.  
Clerk Supreme Court, H. G. Rickerts. Marshal Supreme Court, Oliver T. Crane.



## DISTRICT COURTS OF MONTANA.

No.	Office.	Name.	P. O. Address.	Counties Composing District
1	District Judge Dept. No. 1	Henry C. Smith.....	Helena .. ...	Lewis and Clarke .....
1	District Judge Dept. No. 2	J. M. Clements .....	Helena .. ...	Lewis and Clarke .....
2	District Judge Dept. No. 1	Edw. W. Harney .....	Butte .....	Silver Bow .....
2	District Judge Dept. No. 2	Wm. Clancy .....	Butte .....	Silver Bow .....
3	District Judge .....	Wellington Napton .....	Anaconda ..	Deer Lodge; Granite .....
4	District Judge .....	Frederick C. Webster .....	Missoula ..	Missoula, Ravalli .....
5	District Judge .....	M. H. Parker .....	Boulder .....	Beaverhead, Jefferson, Madison ..
6	District Judge .....	W. H. Poorman .....	Livingston ..	Carbon, Park, Sweet Grass .....
7	District Judge .....	C. H. Loud .....	Miles City ..	Custer, Dawson, Yellowstone, R'bud ..
8	District Judge .....	J. B. Leslie .....	Great Falls ..	Cascade .....
9	District Judge .....	Wm. L. Holloway .....	Bozeman .....	Gallatin, Meagher, Broadwater ..
10	District Judge .....	Edwin R. Cheadle .....	Lewistown ..	Fergus .....
11	District Judge .....	D. F. Smith .....	Kalispell .....	Flathead, Teton .....
12	District Judge .....	J. W. Tattan .....	Fort Benton ..	Choteau, Valley .....

## OFFICERS APPOINTED BY THE GOVERNOR.

Office.	Name.	P. O. Address	Politics.	Appointed.	Term Expires.
Private Sec'y to Governor ....	Randolph Thompson .....	Helena.....	Democrat.. . . .	Jan. 7, 1901	Jan. 7, 1905
State Land Agent .....	Henry Neill .....	Helena.....	Populist .....	.....	.....
Register State Land Office ..	Harry D. Moore .....	Helena.....	Populist .....	Mar. 9, 1897	Mar. 9, 1901
State Examiner .....	John G. Moroney .....	Helena.....	Democrat .....	Feb. 22, 1897	Feb. 23, 1901
State Veterinary Surgeon ....	Morton E. Knowles .....	Helena.....	Democrat .....	Feb. 16, 1897	Mar. 7, 1901
Inspector of Mines .....	John Byrne .....	Helena.....	Populist .....	Feb. 2, 1901	Feb. 2, 1905
Deputy Inspector of Mines ...	John T. Barry .....	Helena.....	Democrat .....	Feb. 13, 1901	Feb. 13, 1905
State Boiler Inspector .....	Frank A. Burns .....	Helena.....	Populist .....	Feb. 16, 1897	Mar. 1, 1901
Ass't Boiler Inspector .....	James H. Daily .....	Helena.....	Populist .....	Feb. 16, 1897	Mar. 1, 1901
Com. Agr. Labor and Ind ....	J. A. Ferguson .....	Helena.....	Labor .....	Feb. 1, 1901	Feb. 1, 1905
State Law Librarian .....	Miss Lou Guthrie .....	Helena.....	.....	.....	Mar. 3, 1901
Librarian Historical Society..	Mrs. R. H. Howey .....	Helena.....	.....	.....	.....
Custodian Ft. Ellis Reserva tion .....	Andrew C. Harding .....	Bozeman.....	.....	Jan. 30, 1897	.....
Custodian Ft. Maginnis Res ervation .....	Otto Anderson .....	Ft. Maginnis..	Democrat .....	Feb. 6, 1897	.....

## STATE BOARD OF EXAMINERS.

Members.	Title.	Organization.
Joseph K. Toole .....	Governor .....	President.
Geo. M. Hays .....	Secretary of State .....	Secretary.
James Donovan .....	Attorney General .....	Member.

Clerk of the Board, Lou R. Hoss.....

## STATE FURNISHING BOARD.

Members.	Title.	Organization.
Joseph K. Toole .....	Governor .....	President.
Geo. M. Hays .....	Secretary of State .....	Secretary.
James Donovan .....	Attorney General .....	Member.

## STATE BOARD OF EQUALIZATION.

Members.	Title.	Organization.
Joseph K. Toole .....	Governor .....	President.
Geo. M. Hays .....	Secretary of State .....	Secretary.
James Donovan .....	Attorney General .....	Member.
A. H. Barret .....	Treasurer .....	Member.
J. H. Calderhead .....	Auditor .....	Member.

Clerk of the Board, J. J. Ryan.

## SEVENTH ANNUAL REPORT OF BUREAU

## STATE BOARD OF LAND COMMISSIONERS.

Members.	Title.	Organization.
Joseph K. Toole .....	Governor .....	President.
W. W. Welch .....	Sup't. Public Instruction .....	Secretary.
Geo. M. Hays .....	Secretary of State .....	Member.
James Donovan .....	Attorney General .....	Member.

## ARID LAND GRANT COMMISSION.

Members.	Organization.	P. O. Address.	Appointed.	Term Expires.
Thos. C. Marshall .....	Chairman .....	Missoula ...	Apr. 3, 1897	Apr. 3, 1901
Donald Bradford .....	Vice-Chairman .....	Helena ...	Apr. 3, 1897	Apr. 3, 1901
C. O. Reed .....	Secretary .....	Helena ...	Apr. 3, 1897	Apr. 3, 1903
D. A. Cory .....	Member .....	Helena ...	Apr. 3, 1897	Apr. 3, 1899
Jos. T. Brown .....	Member .....	Miles City ...	Jan. 8, 1900	Apr. 3, 1905

## STATE BOARD OF PRISON COMMISSIONERS.

Members.	Title.	Organization.
Joseph K. Toole .....	Governor .....	President.
Geo. M. Hays .....	Secretary of State .....	Secretary.
James Donovan .....	Attorney General .....	Member.

Clerk of the Board, C. S. Ashby.

## STATE BOARD OF PARDONS.

Members.	Title.	Organization.
James Donovan .....	Attorney General .....	President.
Geo. M. Hays .....	Secretary of State .....	Secretary.
J. H. Calderhead .....	Auditor .....	Member.

Clerk of the Board, Miss Anita D. Rosecrans.

## STATE BOARD OF COMMISSIONERS FOR INSANE.

Members.	Title.	Organization.
Joseph K. Toole .....	Governor .....	President.
Geo. M. Hays .....	Secretary of State .....	Secretary.
James Donovan .....	Attorney General .....	Member.

## STATE BOARD OF CHARITIES AND REFORM.

Members.	Organization.	P. O. Address.	Appointed.	Term Expires.
Rev. E. J. Groeneveld .....	President .....	Butte ...	Dec. 14, 1895	Mar. 27, 1899
Rev. Walter M. Jordan... ..	Secretary .....	Helena ...	Mar. 8, 1900	Mar. 27, 1901
Rev. W. W. VanOrsdel ...	Member.....	Helena ...	Mar. 2, 1897	Mar. 27, 1903

## HOME FOR ORPHANS, FOUNDLINGS AND DESTITUTE CHILDREN, TWIN BRIDGES.

## BOARD OF TRUSTEES AND MANAGEMENT.

Members.	Organization.	P. O. Address.	Appointed.	Term Expires.
Patrick Carney .....	President .....	Parrot .....	Feb. 24, 1897	Mar. 27, 1901
Jno. R. Comfort .....	Secretary .....	Twin Bridges .....	Mar. 29, 1895	Mar. 27, 1899
Amos Eastman .....	Treasurer .....	Twin Bridges .....	May 21, 1900	Mar. 27, 1903
Jno. M. Brooks .....	Member.....	Twin Bridges .....	Feb. 24, 1897	Mar. 27, 1901
Wasson M. Oliver .....	Member.....	Dillon .....	Feb. 24, 1897	Mar. 27, 1901

## MANAGEMENT.

Wiley Mountjoy, Superintendent .....Twin Bridges.

## STATE CAPITOL COMMISSION.

Members.	Organization.	P. O. Address.	Appointed.	Term Expires.
Joseph K. Toole .....	Chairman, ex-officio .....	Helena.....	.....	.....
J. M. Fox .....	.....	Red Lodge .....	Mar. 13, 1897	.....
A. D. Peck .....	.....	Deer Lodge .....	Mar. 13, 1897	.....
Elizur Beach .....	.....	Augusta .....	Mar. 18, 1897	.....
Thomas Greenough .....	.....	Missoula .....	Feb. 13, 1901	.....

## STATE LAW LIBRARY BOARD OF TRUSTEES.

Members.	Organization.	P. O. Address.	Appointed.	Term.	Expires.
Theo. Brantley.....	President .....	Helena .....	Ex-officio....	Six years .....	Jan. 2, 1905
Geo. R. Milburn ....	Member .....	Helena .....	Ex-officio....	Six years .....	Jan. 7, 1907
Wm. T. Pigott .....	Member .....	Helena .....	Ex-officio....	Six years .....	Jan. 2, 1903
J. H. Calderhead ....	Member .....	Helena .....	Ex-officio....	Four years .....	Jan. 7, 1905
Geo. M. Hays.....	Secretary .....	Helena .....	Ex-officio....	Four years .....	Jan. 7, 1905

## STATE HISTORICAL SOCIETY—BOARD OF TRUSTEES.

Members.	Organization.	P. O. Address.	Appointed.	Term.	Term Expires.
W. B. Hundley .....	President .....	Helena .....	Mar. 2, 1897	Two years .....	Mar. 1, 1899
T. C. Bach .....	Secretary .....	Helena .....	Mar. 2, 1897	Two years .....	Mar. 1, 1899
A. J. Craven .....	Member .....	Helena .....	Mar. 2, 1897	Two years .....	Mar. 1, 1899
C. O. Reed .....	Member .....	Helena .....	Mar. 2, 1897	Two years .....	Mar. 1, 1899
James W. Forbis .....	Member .....	Butte .....	Feb. 13, 1897	Two years .....	Mar. 1, 1899

Librarian—MRS. R. H. HOWIE.

## STATE BOARD OF EDUCATION.

Members.	Organization.	P. O. Address.	Appointed.	Term Expires.
Joseph K. Toole .....	Chairman .....	Helena .....	Ex-officio....	.....
W. W. Welsh.....	Secretary.....	Helena .....	Ex-officio....	.....
Jos. Donavan .....	Member .....	Helena .....	Ex-officio....	.....
O. F. Goddard .....	Member .....	Billings .....	Feb. 13, 1895	Feb. 1, 1899
John T. Hendricks ..	Member .....	Butte .....	Feb. 17, 1900	Feb. 17, 1902
J. M. Hamilton .....	Member .....	Missoula .....	Mar. 1, 1893	Feb. 1, 1898
J. G. McKay .....	Member .....	Butte .....	Jan. 29, 1897	Feb. 1, 1900
O. P. Chisholm.....	Member .....	Bozeman .....	Jan. 29, 1897	Feb. 1, 1900
H. R. Melton.....	Member .....	Dillon .....	Jan. 29, 1897	Feb. 1, 1901
M. J. Garret .....	Member .....	Helena .....	Jan. 29, 1897	Feb. 1, 1901
N. W. McConnell ....	Member .....	Helena .....	Jan. 1, 1899	Feb. 1, 1903

**STATE BOARD OF SCHOOLTEXT-BOOK COMMISSIONERS.**  
(Created by act proved Mar. 1, 1897.)

Members.	Organization.	P. O. Address.	Appointed.	Term Expires.
Supt. of Pub. Instruct'n, W. W. Welsh	Chairman .....	Helena .....	Ex-officio....	.....
E. O. Rusenburg .....	Secretary .....	Glendive .....	Mar. 25, 1897	Not specified
Att'y General, James Donovan .....	Member .....	Helena .....	Ex-officio....	.....
Pres. Mont. University, O. J. Craig ..	Member .....	Missoula .....	Ex-officio....	.....
Pres. Agri. College, James Reid .....	Member .....	Bozeman .....	Ex-officio....	.....
J. G. McKay .....	Member .....	Butte .....	Mar. 25, 1897	Not specified
M. S. Stapleton .....	Member .....	Anaconda .....	Mar. 25, 1897	Not specified

**UNIVERSITY OF MONTANA—EXECUTIVE COMMITTEE.**

Members.	Organization.	P. O. Address.	Appointed.	Term Exp.
J. H. T. Ryman .....	President .....	Missoula .....	Dec. .., 1896	Feb. .., 1902
T. C. Marshall .....	Secretary .....	Missoula .....	Dec. .., 1896	Feb. 1, 1901
Hiram Knowles .....	Member .....	Missoula .....	Dec. .., 1894	Feb. 1, 1900

**UNIVERSITY OF MONTANA, MISSOULA, FACULTY.**

Oscar J. Craig, A. M. Ph. D.....	Professor of History.
Miss Cynthia E. Riley, B. S.....	Professor of Mathematics.
W. M. Aber, A. B.....	Professor of Latin and Greek.
Fred C. Scheuch, M. E. A. C.....	Professor of Modern Languages and Mechanical Engineering.
Morton J. Elrod, M. A.....	Professor of Biology.
Mrs. Walter Whittaker.....	Instructor in Music.
Eloise Knowles .....	Assistant in the Preparatory Dep't.
William D. Hawkins, A. B. ....	Instructor in Chemistry.
Louise Hathaway .....	Assistant in Mathematics.
Frances Corbin .....	Professor of English and Literature.
J. P. Rowe, B. S. ....	Instructor in Physics and Geology.
Grace Herndon .....	Instructor in Vocal Music.
Mary A. Craig .....	Librarian.

**STATE NORMAL SCHOOL, DILLON, MONTANA.**  
Control and General Supervision vested in State Board of Education,  
**LOCAL EXECUTIVE BOARD.**

Members.	Organization.	P. O. Address.	Appointed.	Term Expires.
Leonard Eliel .....	President .....	Dillon .....	Mar. 29, 1897	Mar. 31, 1900
A. L. Stone .....	Sec'y and Treas .....	Dillon .....	Mar. 23, 1897	Mar. 31, 1900
B. F. White.....	Member .....	Dillon .....	Mar. 23, 1897	Mar. 31, 1900
F. C. Kress .....	Member .....	Dillon .....	Apr. 12, 1897	Mar. 31, 1900
Edwin Norris .....	Member .....	Dillon .....	Mar. 23, 1897	Mar. 31, 1900

**STATE NORMAL SCHOOL FACULTY.**

Dr. G. J. McAndrew, President .....	Psychology and Pedagogy
Dr. H. H. Swain .....	Economics and History
J. E. Monroe, A. B.....	Natural Science
Laura L. Miller, B. L. ....	English and Latin
Chas. J. Fenner, M. S.....	Mathematics
Annie L. Harwood, B. L.....	Training
Bertha Huntsman .....	Physical Culture and Ass't in English
E. J. Passmore .....	Director of Music



MONTANA COLLEGE OF AGRICULTURE AND MECHANIC ARTS AND THE  
EXPERIMENT STATION.

Located at Bozeman by act approved February 16, 1893. General control vested in  
the State Board of Education

## EXECUTIVE BOARD.

Members.	Organization.	P. O. Address.	Appointed.	Term Exp.
Lester S. Wilson .. . . .	President .....	Bozeman .. . . .	Feb. 15, 1897	Feb. 1, 1901
Peter Koch .....	Sec'y and Treas	Bozeman .. . . .	Mar. 21, 1893	Feb. 1, 1902
Walter S. Hartman .....	Member .....	Bozeman .. . . .	.....	Feb. 1, 1903
John M. Robinson .....	Member .....	Bozeman .. . . .	.....	Feb. 1, 1903
Joseph Kountz .....	Member .....	Manhattan .. . . .	.....	Feb. 1, 1904

## FACULTY OF AGRICULTURAL COLLEGE.

JAMES REID, A. B. (McGill University) President.

Professor of Mental, Moral and Political Science and Astronomy.

FRANK W. TRAPHAGEN, Ph. D. (Columbia), F. C. S.

Professor of Physics, Chemistry and Geology.

MRS. F. E. MARSHALL.

Professor of Art.

W. H. WILLIAMS, B. E. E. (Univ. of Wisconsin),

Professor of Mechanical and Electrical Engineering.

W. F. BREWER, M. A. (Harvard),

Professor of Latin and English.

AARON H. CURRIER, A. M. (Oberlin),

Professor of French and German.

.....  
Professor of Military Science and Tactics.

MISS LILA A. HARKINS, M. S. (S. Dak. Agr. Col.),

Professor of Domestic Science.

ROBERT S. SHAW, B. S. A. (Ontario Agr. Col.),

Professor of Agriculture.

J. W. BLANKINSHIP, Ph. D. (Harvard),

Professor of Botany.

SAMUEL FORTIER, Ma. E. (McGill Univ.),

Professor of Civil Engineering.

R. A. COOLEY, B. S. (Mass. Agr. Col.),

Professor of Zoology and Entomology.

H. G. PHELPS,

Principal of Business Department.

MISS M. A. CANTWELL,

Principal of Preparatory Department.

W. M. COBLEIGH, E. M. (Col. of Montana) A. M., (Columbia Univ.),

Instructor in Physics and Chemistry.

W. D. THALLMAN (Univ. of Wisconsin),

Instructor in Mathematics.

E. B. McCORMICK, S. B. (Mass. Inst. of Tech.),

Instructor in Mechanical Engineering.

MISS HELEN R. BREWER, A. B. (Iowa Col.),

Instructor in Latin and History.

MRS. M. K. HALL, B. Ph. (Oberlin College),

Instructor in Preparatory Department.

MR. J. H. GILL, M. E. (Univ. of Minn.),

Instructor in Mechanical Practice.

E. C. WOODRUFF, Ph. D. (Univ. of Mich.),

Assistant in Chemistry.

MR. ED. BURK. Assistant in Experiment Station Laboratory.

## SEVENTH ANNUAL REPORT OF BUREAU

MISS EMMA STOCKINGER,  
Instructor in Stenography and Typewriting.

MISS KATE P. CALVIN,  
Piano.

MRS. MARY WINTER,  
Librarian.

## EXPERIMENT STATION STAFF.

SAMUEL FORTIER, M. E.,  
Director and Irrigation Engineer.

F. W. TRAPHAGEN,  
Chemist.

J. W. BLANKINSHIP,  
Botanist.

R. S. SHAW,  
Agriculturist.

SAMUEL FORTIER,  
Irrigation Engineer.

ROBERT A. COLEY,  
Zoologist and Entomologist.

HENRY C. GARDINER,  
Assistant in Experiment Station.

MONTANA STATE SCHOOL OF MINES, BUTTE.  
COMMISSION AND BOARD OF TRUSTEES.

Members.	Organization.	P. O. Address.	Appointed.	Term Expires.
J. E. Rickards .....	President .....	Butte . . . . .	Dec. 5, 1899	Jan. 1, 1904
Geo. E. Monthrop .....	Member .....	Butte . . . . .	Dec. 5, 1899	Jan. 1, 1902
Wm. Y. Pemberton .....	Member .....	Butte . . . . .	Dec. 5, 1899	Jan. 1, 1902

## FACULTY.

Nathan R. Leonard, A. M. .... Acting President and Professor of Mathematics  
 William G. King, A. M. .... Professor of Chemistry and Metallurgy  
 Alexander N. Winchell, Ph. D. .... Professor of Geology, Mining and Mineralogy  
 Chas. H. Bowman, M. S. .... Professor of Mechanics and Mining Engineering  
 Harold S. Boardman, C. E. .... Instructor in Draughtnig and Mining Engineering

## STATE REFORM SCHOOL, MILES CITY, MONT.

## BOARD OF TRUSTEES AND MANAGEMENT.

Members.	Title.	Address.	Term Expires.
J. W. Strevell .....	President ..	Miles City .....	March 29, 1902.
Jno. S. Truscott .....	Member ...	Miles City .....	March 27, 1901.
J. B. Hawkins .....	Member ...	Miles City .....	April 1, 1903.

## MANAGEMENT AND INSTRUCTORS.

C. B. Dickinson .....

Director.

Mrs. C. B. Dickinson .....

Matron.

J. B. Hawkins .....

Overseer.

A. D. Perkins .....

Sup't Boys' Building and Musical In-  
structor.

J. A. Andrews .....

Teacher.

Elizabeth Mills .....

Teacher.

W. E. Ainsworth .....

Officer Company "A."

Joseph Jenison .....

Officer Company "B."

George N. Cheever .....

Engineer.

Mrs. Martha Cheever .....

Seamstress.

D. S. Johnson .....

Night Watchman.

Lena Olsen .....

Laundress.

Chas. E. Hamilton .....

Cook Boys' Building.

Mrs. D. L. Shy .....

Cook Girls' Building.

**STATE DEAF AND DUMB ASYLUM.**  
Control and Supervision Vested in the State Board of Education.  
**BOARD OF TRUSTEES AND MANAGEMENT.**

Name.	Organization.	P. O. Address.	Term Expires.
Jno. F. Sheehy .....	President .....	Boulder ....	March 21, 1903.
Charles Scharf .....	Secretary .....	Boulder ....	March 21, 1902.
Wm. V. Meyers .....	Member .....	Boulder ....	May 21, 1904.

**MANAGEMENT.**

Thos. S. McAloney .....	Superintendent .....	Boulder.
E. A. Irwin, M. D. ....	Physician .....	Boulder.
Miss Carrie R. Stinson .....	Matron .....	Boulder.
Mrs. Rena Phillips .....	Gen'l. Supervisor, Etc. ....	Boulder.
Ira D. Shope .....	Engineer and Farmer .....	Boulder.

**INSTRUCTORS.**

Louis A. Divine .....	Teacher of the Deaf.
Allen T. Schoolfield .....	Teacher of the Deaf.
Miss Ellerbe Holt .....	Teacher of the Blind.
Max W. Voss .....	Music Teacher of the Blind.

**INDUSTRIAL DEPARTMENT.**

Louis A. Divine .....	Teacher of Carpentry.
Mrs. Rena Phillips .....	Teacher of Dressmaking and Sewing.
Mrs. Emma Farrar .....	Teacher of Cooking.
Mrs. Massa .....	Teacher of Laundrying.

**STATE BOARD OF PHARMACY.**

Members.	Organization.	P. O. Address.	Appointed.	Term Expires.
C. B. Haskins ... ..	President .....	Butte ....	Dec. 28, 1900	Mar. 26, 1903
J. B. Lockwood ... ..	Secretary .....	Helena ... ..	Mar. 26, 1898	Mar. 26, 1901
Sid J. Coffee.....	Treasurer .....	Missoula . ...	June 2, 1898	Mar. 26, 1902

**BOARD OF MEDICAL EXAMINERS OF MONTANA.**

Members.	Organization.	P. O. Address.	Appointed.	Term.	Term Expires.
Jno. A. Sweat .....	President .....	Great Falls ...	Nov. 18, 1898	Seven years ....	Dec. 31, 1901
H. Chapple.....	Secretary .....	Fillings.....	Feb. 25, 1898	Seven years ....	Dec. 31, 1902
W. C. Riddell .....	Member .....	Helena.....	Mar. 17, 1892	Seven years ....	Dec. 31, 1898
W. H. Campbell .....	Treasurer.....	Livingston... ..	Jan. 3, 1898	Seven years ....	Dec. 31, 1904
T. J. Murray ... ..	Member .....	Butte .....	Dec. 29, 1898	Seven years ....	Dec. 31, 1900
Geo. H. Barbour.....	Member .....	Helena .....	Dec. 31, 1899	Seven years ....	Dec. 31, 1906
O. C. Evans .....	Member .....	Missoula .....	Jan. 13, 1897	Seven years ....	Dec. 31, 1903

**STATE BOARD OF DENTAL EXAMINERS.**

Members.	Organization.	P. O. Address.	Appointed.	Term Expires.
W. A. Tudor .....	President .....	Bozeman ... ..	Mar. 29, 1895	Mar. 29, 1900
H. J. Worth .....	Treasurer .....	Helena .. ...	Mar. 28, 1898	Mar. 29, 1903
W. J. Hall .....	Member .....	Butte ....	Mar. 28, 1898	Mar. 29, 1899

## SEVENTH ANNUAL REPORT OF BUREAU

## NATIONAL GUARD OF MONTANA.

Joseph K. Toole, Commander-in-Chief.

## GENERAL STAFF.

Rank and Name.	Office.	Station.
Brigadier General, Chas. F. English....	Adjutant General .....	Helena.
Colonel, James T. Stanford .....	Inspector General .....	Great Falls
Lieut.-Colonel, J. D. Eaton.....	Ass't. Inspector General .....	Kalispell.
Colonel, R. D. Leggat .....	Quartermaster General .....	Butte.
Colonel, A. J. Campbell .....	Commissary General .....	Butte.
Colonel, W. C. Riddell .....	Surgeon General .....	Helena.
Major, H. J. Miller .....	Judge Advocate .....	Butte.
Lieut.-Colonel, Jno. F. Firch .....	Aide-de-Camp .....	Butte.
Lieut.-Colonel Thos. McTague .....	Aide-de-Camp .....	Deer Lodge
Lieut.-Colonel, C. M. Crutchfield.....	Aide-de-Camp .....	Hamilton.

## MEDICAL DEPARTMENT.

Rank.	Name.	Residence.
Surgeon (Major) .....	W. C. Riddell .....	Helena.
Assistant Surgeon (Captain) .....	H. W. Foster .....	Bozeman.

## SOLDIERS' HOME, COLUMBIA FALLS.

## BOARD OF MANAGERS.

Members.	Organization.	P. O. Address.	Appointed.	Term Expires.
John L. Sloan .....	President .....	Missoula .....	Apr. 15, 1900	Apr. 18, 1903
C. B. Miller .....	Secreary .....	Helena .....	Apr. 18, 1895	Apr. 18, 1899
J. D. Eaton .....	Member .....	Kalispell .....	Aug. 3, 1898	Mar. 1, 1891
H. S. Howell .....	Member .....	Helena .....	Feb. 9, 1897	Mar. 1, 1891
N. H. Manchester .....	Member .....	Butte .....	.....	Mar. 3, 1901

Capt. Jno. R. Hiltman, Commandant of Home.

## UNITED STATES PENSION BOARD.

Meets 1st and 3d Wednesdays each month.

Members.	Organization.	P. O. Address.
Dr. W. L. Steele .....	President .....	Helena.
Dr. C. B. Miller .....	Secretary .....	Helena.
Dr. J. Alex. Moore .....	Treasurer .....	Helena.

## STATE GAME AND FISH COMMISSION.

Members.	Organization.	P. O. Address.	Appointed.	Term Expires.
M. J. Elrod .....	Chairman .....	Missoula .....	Mar. 6, 1899	Feb. 9, 1902
R. A. Wagner.....	Member .....	Bozeman .....	Mar. 8, 1899	Feb. 9, 1902

## STATE INSANE ASYLUM.

Title.	Location.	Located by	Contractors.
State Insane Asylum ..	Warm Springs .....	Not located .....	Mitchell & Mussigbrod .



## STATE PRISON.

Title.	Location.	Located by	Contractors.
Western State Prison	Deer Lodge .....	Act approved Mar. 3, 189	Conley & McTague...

## STATE BOARD OF SHEEP COMMISSIONERS.

1900.

County.	Commissioner.	Address.
Beaverhead .....	James P. Murray .....	Dillon.
Broadwater .....	R. H. Clendenin .....	Glenwood.
Carbon .....	David Smethurst .....	Red Lodge.
Cascade .....	H. H. Nelson .....	Cascade.
Choteau .....	George B. Bourne .....	Hill.
Custer .....	Frank D. O'Neill .....	Miles City.
Dawson .....	William Lindsay .....	Glendive.
Deer Lodge .....	William Williams .....	Deer Lodge.
Fergus .....	David Hilger .....	Lewistown.
Flathead .....		
Gallatin .....	John F. Work .....	Bozeman.
Granite .....		
Jefferson .....		
Lewis and Clarke .....	T. C. Power .....	Helena.
Madison .....	S. R. Buford .....	Virginia City.
Meagher .....	D. E. Folsom .....	White Sulphur Springs.
Missoula .....	D. R. Maclay .....	Lo Lo.
Park .....	S. O'N. C. Brady .....	Myersburg.
Ravalli .....	J. L. Humble .....	Corvallis.
Silver Bow .....	T. Clowes Miles .....	Silver Bow.
Sweet Grass .....	W. P. Franklin .....	Melville.
Teton .....	George I. Smith .....	Choteau.
Valley .....	L. H. Mills .....	Saco.
Yellowstone .....	B. P. Moss .....	Billings.

## DEPUTY SHEEP INSPECTORS.

County.	Inspector.	Address.
Beaverhead .....	L. E. Thomas .....	Dillon.
Broadwater .....	C. W. Cook .....	Unity.
Carbon .....	Frank L. Clark .....	Red Lodge.
Cascade .....	Warren McNinch .....	Great Falls.
Choteau .....	John F. Patterson .....	Fort Benton.
Custer .....	Dan. H. Bowman .....	Knowlton.
Dawson .....	Joel Gleason .....	Glendive.
Deer Lodge .....	John A. Robinson .....	Deer Lodge.
Fergus .....	David Hilger .....	Lewistown.
Gallatin .....	John F. Work .....	Bozeman.
Madison .....	L. S. Briggs .....	Ennis.
Meagher .....	C. W. Cook .....	Unity.
Missoula .....	Dr. G. T. McCullough .....	Missoula.
Park .....	J. W. Van Doren .....	Livingston.
Ravalli .....	Thomas A. Chaffin .....	Corvallis.
Silver Bow .....	Dr. J. D. McGregor .....	Butte.
Sweet Grass .....	Albert Harrison .....	Big Timber.
Teton .....	E. Rose .....	Cut Bank.
Valley .....	J. H. Jordan .....	Saco.
Yellowstone .....	A. C. Logan .....	Billings.

## SEVENTH ANNUAL REPORT OF BUREAU

## ASSISTANT DEPUTY SHEEP INSPECTORS.

Carbon .....	W. R. Bainbridge .....	Bean.
Choteau .....	Frank Hansen .....	Chinook.
Choteau .....	J. F. Freeman .....	Chinook.

## STATE BOARD OF STOCK COMMISSIONERS.

Counties.	Name.	Residence.
Beaverhead .....	M. Barrett .....	Dillon.
Broadwater .....	F. J. Keene .....	Canton.
Carbon .....	J. N. Tolman .....	Red Lodge.
Cascade .....	Jacob Seiben .....	Cascade.
Choteau .....	C. J. McNamara .....	Big Sandy.
Custer .....	O. C. Cato .....	Miles City.
Dawson .....	Chas. Krug .....	Glendive.
Deer Lodge .....	Jno. Bielenberg .....	Deer Lodge.
Fergus .....	S. S. Hobson .....	Utica.
Flathead .....	J. A. Ford .....	Kalispell.
Gallatin .....	V. A. Cockrill .....	Central Park.
Granite .....	A. A. McDonald .....	Philipsburg.
Jefferson .....	Jno. Flaherty .....	Boulder.
Lewis and Clarke .....	J. T. Murphy .....	Helena.
Madison .....	W. J. Ennis .....	Puller Springs.
Meagher .....	Len Lewis .....	Lewis.
Missoula .....	J. A. McGowan .....	Plains.
Park .....	G. W. Wakefield .....	Livingston.
Ravalli .....	G. W. Ward .....	Hamilton.
Silver Bow .....	Levi Carter .....	Butte.
Sweet Grass .....	J. W. Kelly .....	Springdale.
Teton .....	W. K. Floweree .....	Sun River.
Valley .....	M. E. Milner .....	Malta.
Yellowstone .....	David Fratt .....	Billings.
J. T. Murphy, President.		C. C. Smith, Clerk.
		W. G. Preuitt, Secretary.

## STOCK INSPECTORS.

R. P. Heren .....	Chicago, Ill.
C. L. Heren .....	Chicago, Ill.
E. K. Preuitt .....	Helena, Mont.
E. D. Bowmer .....	Lewistown, Mont.
W. W. Green .....	Ennis, Mont.
Frank Carter .....	Butte, Mont.
W. D. Smith .....	Miles City, Mont.
Harry Lund .....	Fort Benton, Mont.
H. E. Bourdette .....	St. Paul, Minn.
R. H. Rickard .....	South Omaha, Neb.
J. W. Collins .....	Billings, Mont.
N. M. Standaher .....	Dillon, Mont.

## DEPUTY VETERINARIANS IN THE STATE OF MONTANA.

County.	Name.	Address.
Cascade .....	.....	.....
Choteau .....	Harry Lund .....	Ft. Benton.
Choteau .....	.....	.....
Choteau .....	K. Preuit .....	Chinook.
Custer .....	W. D. Smith .....	Miles City.
Custer .....	T. W. Longley .....	Forsyth.
Dawson .....	Joel Gleason .....	Glendive.
Dawson .....	.....	Buford, N. D.
Deer Lodge .....	Dr. J. F. Spellman .....	Anaconda.
Deer Lodge .....	J. M. Boardman .....	Deer Lodge.
Flathead .....	Thos. Quirk .....	Tobacco Plains.
Flathead .....	Dr. C. E. Depew .....	Kalispell.
Missoula .....	C. C. Willis .....	Helena.
Lewis and Clarke .....	Dr. S. W. McClure .....	Plains.
Silver Bow .....	Dr. J. D. McGregor .....	Butte.
Sweet Grass .....	Dr. W. A. Moore .....	Big Timber.
Sweet Grass .....	J. F. Bryson .....	Merrill.
Teton .....	Dr. Thos. Brooks .....	Choteau.
Valley .....	John Survant .....	Malta.
Yellowstone .....	.....	.....
Yellowstone .....	J. W. Collins .....	Billings.

## DIRECTORY OF UNITED STATES OFFICERS IN MONTANA.

Office.	Name.	Residence.
Judge of U. S. District Court .....	Hiram Knowles .....	Missoula.
U. S. District Attorney .....	W. B. Rodgers .....	Anaconda.
Asst. U. S. District Attorney .....	J. C. English .....	Anaconda.
Clerk of U. S. District Court .....	George W. Sproule .....	Helena.
United States Marshal .....	J. P. Woolman .....	Helena.
Surveyor General .....	E. W. Beattie .....	Helena.
Collector of Internal Revenue .....	C. M. Webster .....	Great Falls.
Collector of U. S. Customs .....	David G. Browne .....	Great Falls.
Assayer U. S. Assay Office.....	B. H. Tatem .....	Helena.
Melter U. S. Assay Office ....	L. A. Walker .....	Helena.
Register Helena Land Office .....	G. D. Greene .....	Helena.
Receiver Helena Land Office .....	John Horsky .....	Helena.
Register Bozeman Land Office .....	A. L. Love .....	Bozeman.
Receiver Bozeman Land Office .....	John F. Asbury .....	Bozeman.
Register Miles City Land Office.....	Sam Gordon .....	Miles City.
Register Missoula Land Office .....	E. E. Hershey .....	Missoula.
Receiver Missoula Land Office .....	W. Q. Ranft .....	Missoula.
Register Lewistown Land Office .....	David Hilger .....	Lewistown.
Receiver Lewistown Land Office .....	John P. Barnes .....	Lewistown.
Register Kalispell Land Office .....	Frank H. Nash .....	Kalispell.
Receiver Kalispell Land Office .....	W. C. Whipps .....	Kalispell.

## NOTE.

Receiver Bozeman Land Office.....A. J. Edsall  
 Receiver Miles City Land Office.....James M. Rhoades  
 Receiver Lewistown Land Office ....Edward Brassey  
 Register Lewistown Land Office .....Louis W. Eldridge

COMMISSIONERS OF DEEDS FOR THE STATE OF MONTANA, DEC. 31, 1900.  
CALIFORNIA.

Date Issued and Name.	Address.	Expires.
Sept. 4, 1896—King, Jas. L.....	308 California St., San Francisco.....	Sept. 4, 1901.
March 5, 1897—Knox, Geo. T.....	144 California St., San Francisco.....	March 5, 1902.

## SEVENTH ANNUAL REPORT OF BUREAU

## CONNECTICUT.

Feb. 4, 1896—Cleveland, L. W.....	69 Church St., New Haven.....	Feb. 4, 1901.
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## DISTRICT OF COLUMBIA.

May 13, 1896—Mitchell, John E.....	1321 F. St. N. W., Washington, D. C.....	May 13, 1901.
July 22, 1896—Bundy, Charles S.....	317-319 4½ st. N. W., Washington, D. C.	July 22, 1901.

## ILLINOIS.

June 13, 1895—Humphrey, Wirt E..	551 Monadnock Building, Chicago, Ill...	June 13, 1900.
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## LOUISIANA.

March 2, 1897—Soniat, Maloney C..	Corner of Carondelet and Common Sts., New Orleans .....	March 2, 1902.
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## MASSACHUSETTS.

Dec. 2, 1895—Adams, Chas. Hall ...	23 Court St., Boston .....	Dec. 2, 1901.
Jan. 2, 1896—Jennisson, Samuel....	Boston .....	Jan. 2, 1901.
Jan. 15, 1896—Jones, Edward J.....	61 Court St., Boston .....	Jan. 15, 1901.
Jan. 15, 1896—Forrey, Arthur H....	23 Court St., Boston .....	June 15, 1901.
April 5, 1897—Bissell, Clarence H....	Winthrop, Sears Building .....	April 5, 1902.

## MINNESOTA.

Nov. 11, 1895—Sweetser, A. F.....	Minneapolis .....	Nov. 11, 1900.
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## MISSOURI.

May 13, 1896—Greene, Charles D....	421 Olive St., St. Louis .....	May 13, 1901.
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## NEW YORK.

Jan. 2, 1896—Mackay, Alfred .....	59 Cedar St., New York .....	Jan. 2, 1901.
Feb. 8, 1896—Corey, Geo. H.....	New York .....	Feb. 8, 1901.
April 18, 1896—Kidder, Leonard R..	45 Wall St., New York.....	April 18, 1901.
April 23, 1896—Mills, Charles Edgar	115 Broadway, New York .....	April 23, 1901.
July 25, 1896—Hillery John A.....	56 Wall St., New York .....	July 25, 1901.
Sept. 25, 1896—Braman, Joseph B....	120 Broadway, New York .....	Sept. 25, 1901.
Jan. 5, 1897—Clarkson, William H.	115 Broadway, New York .....	Jan. 5, 1902.

## PENNSYLVANIA.

June 28, 1895—Fell, William Jenks..	131 S. 5th St., Philadelphia.....	June 28, 1898.
Sept. 5, 1895—Taylor, Samuel L....	Betz Building, Philadelphia.....	Sept. 9, 1900.
Oct. 3, 1896—Hunt, Geo. W.....	623 Walnut St., Philadelphia .....	Oct. 3, 1901.

## GREAT BRITAIN.

Feb. 8, 1897—Hendry J. Burke .....	London .....	Feb. 8, 1902.
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## LIST OF UNITED STATES COMMISSIONERS, DISTRICT OF MONTANA, DEC. 31, 1900.

Name.	Residence.	When Appointed.
Badger, B. W.	White Sulphur Springs	June 30, 1897.
Blair, J. G.	Choteau	June 30, 1897.
Boyle, D. P.	Libby	June 30, 1897.
Brown, F. D.	Philipsburg	June 30, 1897.
Burlingame, J. M.	Great Falls	Sept. 8, 1897.
Cockrill, W. M.	Great Falls	June 30, 1897.
Comfort, J. R.	Twin Bridges	June 30, 1897.
Cameron, E. F.	Vermillion	June 30, 1897.
Catlin, J. B.	Hamilton	June 30, 1897.
Everett, T. M.	Harlem	June 30, 1897.
Eardley, J. R.	Anaconda	July 1, 1897.
Fraser, A.	Billings	June 30, 1897.
Garrett, E. C.	Choteau	Sept. 16, 1897.
Gray, F. L.	Kalispell	Nov. 29, 1897.
Boyle, C. H.	Fort Benton	Dec. 19, 1898.
Lohmiller, C. B.	Poplar	Nov. 17, 1898.
Jakways, C. A.	Ovando	June 30, 1897.
Jewett, H. C.	Absarokee	June 30, 1897.
Kreidler, F. M.	Miles City	June 30, 1897.
Lanphear, O. M.	Big Timber	June 30, 1897.
Lindsey, A. Y.	Tobacco Plains	June 30, 1897.
Logan, Sidney M.	Kalispell.	Nov. 29, 1897.
Meili, H. J.	Havre	June 30, 1897.
Meyer, W. F.	Red Lodge	June 30, 1897.
Morris, F. J.	Grantsdale	June 30, 1897.
Covington, C. C.	Augusta	June 30, 1897.
Moore, W. E.	Philipsburg	May 14, 1898.
McPherson, A. D.	Bozeman	Sept. 8, 1897.
Naughton, W. J.	Butte	June 30, 1897.
Price, L. J.	Dillon	Sept. 16, 1897.
Price, M. C.	Whitlash	June 30, 1897.
Pierson, G. W.	Red Lodge	June 30, 1897.
Posten, J. D.	Libby	June 30, 1897.
Russel, E. C.	Helena	June 30, 1897.
Rainbolt, W. S.	Chinook	June 30, 1897.
Ray, J. H.	Glendive	June 30, 1897.
McIntyre, S. J.	Havre	June 30, 1897.
Skillman, C. N.	Big Timber	June 29, 1898.
Scott, F. H.	Lloyd	June 30, 1897.
Sands, W. B.	Chinook	June 30, 1897.
Sullivan, Jere	Fort Benton	June 30, 1897.
Smith, W. P.	Missoula	June 30, 1897.
Smith, W. G.	Darby	June 30, 1897.
Solleder, G. W.	Darby	June 30, 1897.
Newhall, E. B.	Big Sandy	June 30, 1897.
Warner, A. C.	Choteau	Aug. 1, 1898.
Weldy, B. B.	Chester	June 30, 1897.
Whitney, L. C.	Carbonado	June 30, 1897.
James, J. W.	Anaconda	May 4, 1898.
Cowan, W. T.	Box Elder	Dec. 8, 1897.
Arnour, J. N.	Browning	April 15, 1898.
Word, C. L.	Butte	Dec. 17, 1897.
Melum, B. M.	Capitol	Dec. 8, 1897.
Lewis, J. E.	Columbia Falls	June 30, 1897.
Miller, F. E.	Crow Agency	April 8, 1898.
Brown, Alex	Deer Lodge	April 8, 1898.
Magee, Geo. W.	Dupuyer	April 8, 1898.
Woodward, F. C.	Gebo	Jan. 28, 1898.
Kerr, J. J.	Glasgow	April 26, 1898.
McDowell, John	Gold Butte	April 18, 1899.

## LIST OF U. S. COMMISSIONERS.—(Continued.)

Name.	Residence.	When Appointed.
Sterling, F. P. ....	Helena .....	March 5, 1900.
Woolridge, W. M. ....	Hinsdale .....	April 18, 1899.
Gill, A. D. ....	Sandusky .....	March 5, 1900.
Wilson, James .....	Malta .....	Jan. 10, 1899.
Rhone, J. A. ....	Plains .....	Jan. 10, 1899.
Darling, M. S. ....	Pondera .....	May 8, 1899.
Noyes, A. W. ....	Pony .....	May 8, 1899.
Rood, C. L. ....	Ridgelawn .....	June, 1900.
Wilcox, J. M. ....	Shelby .....	Jan. 26, 1898.
Stone, R. W. ....	Bridger .....	Nov. 5, 1900.
Adams, W. C. ....	Thompson Falls .....	March 26, 1900.
Stevenson, R. R. ....	Wisdom .....	March 9, 1898.
Mushback, J. E. ....	Red Lodge .....	Dec. 22, 1900.

## Population of Montana by Counties and Minor Civil Divisions.

The Government Census Bulletin, June 1st, 1900, gives the following report of the population of the state:

Montana was organized as a territory May 26, 1864, and admitted as a state November 8, 1889. Table 1 shows the population of Montana at each census from 1870 to 1900, inclusive, together with the increase by number and per cent during each decade.

TABLE 1.—POPULATION OF MONTANA, 1870 TO 1900.

CENSUS YEARS.	POPULATION.	INCREASE.	
		Number.	Per Cent.
1900.....	243,329	111,170	84.1
1890.....	132,159	93,600	237.5
1880.....	39,159	18,564	90.1
1870.....	20,595		

The population of the state in 1900 is 243,329, as compared with a population in 1890 of 132,159, showing an increase during the decade of 111,170, or 84.1 per cent. A part of this increase is due to the fact that there were 10,346 Indians and 419 other persons, or a total of 10,765 persons, on Indian reservations, etc., in Montana, who were specially enumerated in 1890 under the provisions of the census act, but were not included in the general population of the state at that census. The population of the territory of Montana in 1870 was 20,595, and in 1889, 39,159, showing an increase of 18,564, or 90.1 per cent. During the following decade, from 1880 to 1890, in the last year of which the territory became a state, the population increased from 39,159 to 132,159, or 237.5 per cent. Although the numerical increase has been greater during the last decade than for any preceding one, the percentage of increase has declined.

The population of Montana in 1900 is more than eleven times as large as the population given for 1870, the first census taken after its organization as a territory in 1864.

The total land surface of Montana is, approximately, 145,310 square miles, the

average number of persons to the square mile at the censuses of 1890 and 1900 being as follows: 1890, 0.9; 1900, 1.7.

Table 2 shows the population of Montana by counties at each census from 1870 to 1900, inclusive, while table 3, which immediately follows, shows, for each county, the increase (or decrease) by number and per cent during the ten years from 1890 to 1900.

TABLE 2.—THE POPULATION OF MONTANA BY COUNTIES, 1870 TO 1900.

COUNTIES.	1900	1890.	1880.	1870.
The State .....	243,329	132,159	39,159	20,595
Beaverhead .....	5,615	4,655	2,712	722
Broadwater <sup>1</sup> .....	2,641	.....	.....	.....
Carbon <sup>2</sup> .....	7,533	.....	.....	.....
Cascade <sup>3</sup> .....	25,777	8,755	.....	.....
Choteau <sup>4</sup> .....	10,966	4,741	3,058	517
Custer <sup>5</sup> .....	7,891	5,308	2,510	38
Dawson <sup>6</sup> .....	2,443	2,056	180	177
Deer Lodge <sup>7</sup> .....	17,393	15,155	8,876	4,367
Fergus <sup>8</sup> .....	6,937	3,514	.....	.....
Flathead <sup>9</sup> .....	9,375	.....	.....	.....
Gallatin <sup>10</sup> .....	9,553	6,246	3,643	1,578
Granite <sup>11</sup> .....	4,328	*	.....	.....
Jefferson <sup>12</sup> .....	5,330	6,026	2,464	1,531
Lewis and Clarke <sup>13</sup> .....	19,171	19,145	6,521	5,040
Madison .....	7,695	4,692	3,915	2,684
Meagher <sup>14</sup> .....	2,526	4,749	2,743	1,387
Missoula <sup>15</sup> .....	13,964	14,427	2,537	2,554
Park <sup>16</sup> .....	7,341	6,881	.....	.....
Ravalli <sup>17</sup> .....	7,822	.....	.....	.....
Silver Bow <sup>18</sup> .....	47,635	23,744	.....	.....
Sweet Grass <sup>19</sup> .....	3,086	.....	.....	.....
Teton <sup>20</sup> .....	5,080	.....	.....	.....
Valleys .....	4,355	.....	.....	.....
Yellowstone <sup>21</sup> .....	6,212	2,065	.....	.....
Crow Indian Reservation.....	2,660	.....	.....	.....

<sup>1</sup> Organized from parts of Jefferson and Meagher in 1897.

<sup>2</sup> Organized from parts of Park and Yellowstone in 1895.

<sup>3</sup> Organized from parts of Choteau, Lewis and Clarke, and Meagher in 1887; part of Meagher annexed since 1890.

<sup>4</sup> Parts taken to form Teton in 1893, and part of Cascade in 1887.

<sup>5</sup> Name changed from Big Horn in 1877; part taken to form part of Yellowstone in 1881.

<sup>6</sup> Valley organized from part of Dawson in 1893.

<sup>7</sup> Parts taken to form Silver Bow in 1881 and Granite in 1893; parts annexed to Flathead and Lewis and Clarke since 1890.

<sup>8</sup> Organized from part of Meagher in 1885.

<sup>9</sup> Organized from part of Missoula in 1893; part of Deer Lodge subsequently annexed.

<sup>10</sup> Parts taken to form Park in 1887 and part of Yellowstone in 1881.

<sup>11</sup> Organized from part of Deer Lodge in 1893.

<sup>12</sup> Part taken to form part of Broadwater in 1897.

<sup>13</sup> Part taken to form part of Cascade in 1887; parts of Deer Lodge and Meagher annexed since 1890.

<sup>14</sup> Parts taken to form Fergus in 1885, of Cascade in 1887, of Sweet Grass in 1895, and part of Broadwater in 1897; parts annexed to Cascade and Lewis and Clarke since 1890.

<sup>15</sup> Parts taken to form Flathead and Ravalli in 1893.

<sup>16</sup> Organized from part of Gallatin in 1887; parts taken to form part of Carbon and Sweet Grass in 1895.

<sup>17</sup> Organized from part of Missoula in 1893.

<sup>18</sup> Organized from part of Deer Lodge in 1881.

<sup>19</sup> Organized from parts of Meagher, Park and Yellowstone in 1895.

<sup>20</sup> Organized from part of Choteau in 1893.

<sup>21</sup> Organized from parts of Custer and Gallatin in 1881; parts taken to form parts of Carbon and Sweet Grass in 1895.

TABLE 3—INCREASE IN POPULATION OF MONTANA BY COUNTIES, 1890 TO 1900.

COUNTIES.	INCREASE.	
	Number.	Per Cent.
The State .....	111,170	84.1
Beaverhead .....	960	.....
Broadwater.....	2,641	.....
Carbon .....	7,533	.....
Cascade .....	17,022	194.4
Choteau .....	6,225	131.3
Custer .....	2,583	48.7
Dawson .....	387	18.8
Deer Lodge .....	2,238	14.8
Fergus.....	3,423	97.4
Flathead .....	9,375	.....
Gallatin .....	3,307	52.9
Granite .....	4,328	.....
Jefferson .....	*696	*11.5
Lewis and Clarke .....	26	0.1
Madison .....	3,003	64.0
Meagher .....	*2,223	*46.8
Missoula.....	*463	*8.2
Park.....	460	6.7
Ravalli.....	7,822	.....
Silver Bow .....	23,891	100.6
Sweet Grass .....	3,086	.....
Teton .....	5,080	.....
Valley .....	4,355	.....
Yellowstone .....	4,147	200.8
Crow Indian Reservation .....	2,660	.....

\* Decrease

The following territorial changes in the counties of Montana have been made since 1890: Flathead organized from part of Missoula in 1893; Granite organized from part of Deer Lodge in 1893; Ravalli organized from part of Missoula in 1893; Teton organized from part of Choteau in 1893; Valley organized from part of Dawson in 1893; Carbon organized from parts of Park and Yellowstone in 1895; Sweet Grass organized from parts of Meagher, Park, and Yellowstone in 1895; Broadwater organized from parts of Jefferson and Meagher in 1897; parts of Deer Lodge annexed to Flathead and Lewis and Clarke; and parts of Meagher annexed to Cascade and Lewis and Clarke.

From the foregoing it appears that 8 counties, namely, Broadwater, Carbon, Flathead, Granite, Ravalli, Sweet Grass, Teton and Valley have been formed since 1890. Of the remaining 16 counties all but 3 have increased in population during the decade. The 3 that show a decrease in population, namely, Jefferson, Meagher and Missoula, have also suffered material losses in territory.

Table 4 shows the population of Montana by minor civil divisions, so far as it was separately returned at the censuses of 1890 and 1900.

POPULATION OF MONTANA BY MINOR CIVIL DIVISIONS.

MINOR AND CIVIL DIVISIONS.	1900.
BEAVERHEAD COUNTY1.....	5,615
Argenta township .....	106
Bannock township.....	418
Barretts township .....	237
Birch Creek township .....	180
Bishop township .....	118
Blacktail township .....	106
Bowen township or Big Hole 15 .....	141
Dell township .....	143
Dewey township .....	115
Dillon township, including Dillon city .....	1,721
Dillon city .....	1,530



MINOR AND CIVIL DIVISIONS.		1900.
Ward 1. . . . .	584	
Ward 2. . . . .	660	
Ward 3. . . . .	296	
Fox township . . . . .		323
Glendale township . . . . .		260
Hecla township . . . . .		185
Horse Prairie township . . . . .		230
Lima township . . . . .		631
Pioneer township . . . . .		22
Polaris township . . . . .		122
Red Rock township . . . . .		131
Wisdom township or Big Hole 16. . . . .		366
<b>BROADWATER COUNTY<sup>2</sup>. . . . .</b>		<b>2,641</b>
Blackwells township. . . . .		33
Canton township . . . . .		277
Diamond City township . . . . .		132
Hassel or St. Louis township . . . . .		130
Jefferson River township . . . . .		29
Lombard township . . . . .		28
Radersburg township . . . . .		365
Toston township . . . . .		187
Townsend township, including Townsendtown . . . . .		895
Townsend town . . . . .		446
Winston or Placer township . . . . .		565
<b>CARBON COUNTY<sup>3</sup> . . . . .</b>		<b>7,533</b>
Bowler township . . . . .		96
Clarks Fork township . . . . .		1,129
Joliet township . . . . .		1,326
Red Lodge township, including Red Lodgetown . . . . .		3,015
Red Lodge town . . . . .		2,152
Ward 1. . . . .	852	
Ward 2. . . . .	800	
Ward 3. . . . .	500	
Red Lodge Creek township . . . . .		527
Reno township . . . . .		197
Stillwater township . . . . .		743
<b>CACADE COUNTY<sup>4</sup>. . . . .</b>		<b>25,777</b>
Barker township . . . . .		220
Belt township . . . . .		2,858
Cascade township . . . . .		705
Chestnut township . . . . .		308
Geyser township . . . . .		284
Great Falls township, including wards 1, 2, 3 and part of ward 4 of Great Falls city . . . . .		13,391
Great Falls city . . . . .		13,053
Total for Great Falls city, in Great Falls and Watson townships. . . . .		14,930
Ward 1. . . . .	2,899	
Ward 2. . . . .	1,800	
Ward 3. . . . .	2,904	
Ward 4. . . . .	7,327	
Kibbey township . . . . .		660
Neihart township, including Neihart town. . . . .		944
Neihart town . . . . .		833
Sand Coulee township. . . . .		2,950
Sun River township . . . . .		687
Truly township . . . . .		531
Watson township, including part of ward 4 of Great Falls city. . . . .		2,228
Great Falls city (part of) . . . . .		1,877
<b>CHOTEAU COUNTY<sup>5</sup>. . . . .</b>		<b>10,966</b>
Big Sandy township . . . . .		757
Chinook township . . . . .		1,586
Fort Benton township, including Fort Benton town . . . . .		2,861
Fort Benton town. . . . .		1,024
Harlem township . . . . .		631
Havre township, including Havre town. . . . .		2,382
Havre town . . . . .		1,033
Highwood township . . . . .		574
Landusky township . . . . .		146

## SEVENTH ANNUAL REPORT OF BUREAU

MINOR AND CIVIL DIVISIONS.		1900.
Sweet Grass township .....		717
Port Belknap Indian reservation .....		1,312
CUSTER COUNTY <sup>6</sup> .....		7,891
Miles City.....		1,938
Ward 1.. .....	975	
Ward 2.....	963	
Northern Cheyenne Indian reservation .....		1,454
DAWSON COUNTY <sup>7</sup> .....		2,443
Glendive township .....		1,435
Mingusville township .....		323
Newlon township.. .....		450
Pearmond township .....		230
DEER LODGE COUNTY <sup>8</sup> .....		17,393
Anaconda township, including Anaconda .....		12,375
Anaconda city .....		9,453
Ward 1.. .....	1,438	
Ward 2.....	1,256	
Ward 3.....	803	
Ward 4.....	1,417	
Ward 5.. .....	2,163	
Ward 6.....	2,376	
Cottonwood township, including Deer Lodge town .....		2,289
Deer Lodge town .....		1,324
Gold Creek township .....		800
Lincoln township .....		1,000
Ophir township.....		929
FERGUS COUNTY <sup>9</sup> .....		6,937
Cottonwood district .....		764
Deerfield district .....		550
Edge, Maiden and Grass Range district.....		1,163
Flat Willow district .....		270
Halbert-Highfield district .....		320
Lavina district .....		323
Lewistown district, including Lewistown village .....		1,826
Lewistown village .....		1,096
Philbrook and Ubet district .....		731
Utica, Denton and Stanford district .....		999
FLATHEAD COUNTY <sup>10</sup> .....		9,375
Columbian township .....		1,192
Flathead township .....		683
Jocko township .....		1,575
Kalispell township, including Kalispell city .....		4,486
Kalispell city .....		2,526
Libby township .....		951
Tobacco Plains township .....		253
Troy township .....		212
Flathead Indian reservation (part of).....		13
Total for Flathead Indian reservation, in Flathead and Missoula counties .....		2,142
GALLATIN COUNTY <sup>11</sup> .....		9,553
Baker precinct.....		219
Belgrade precinct .....		597
Bozeman city, in East, South and West Bozeman precincts .....		3,419
Ward 1.. .....	1,042	
Ward 2.....	873	
Ward 3.....	920	
Ward 4.....	584	
Bridger precinct .....		244
Chestnut precinct .....		506
Connel precinct .....		204
East Bozeman precinct, exclusive of part of Bozeman city .....		49
Flathead precinct .....		394
Gallatin precinct .....		233
Hillsdale precinct .....		250
Madison precinct .....		123

MINOR AND CIVIL DIVISIONS.	1900.
Manhattan precinct .....	369
Middle Creek precinct .....	203
Monforten precinct .....	300
Reese Creek precinct .....	194
Salesville precinct .....	431
South Bozeman precinct, exclusive of part of Bozeman city .....	202
Spanish Creek precinct .....	89
Springhill precinct .....	238
Three Forks precinct .....	68
West Bozeman precinct, exclusive of part of Bozeman city .....	678
West Gallatin precinct .....	316
Willow Creek precinct .....	221
<b>GRANITE COUNTY</b> <sup>12</sup> .....	<b>4,328</b>
Bearmouth precinct .....	147
Bimetallic precinct .....	125
Combination precinct .....	61
Drummond precinct .....	285
Garnet precinct .....	302
Granite precinct .....	1,079
Head of Gold Creek precinct .....	32
New Chicago precinct .....	288
North Philipsburg precinct, <sup>2</sup> including part of Philipsburg city .....	796
Philipsburg city (part of) .....	560
Total for Philipsburg city, in North and South Philipsburg precinct.	995
Princeton precinct .....	74
Quigley precinct .....	54
Red Lion precinct .....	20
Royal precinct .....	7
Rumsey precinct .....	6
South Philipsburg precinct, <sup>2</sup> including part of Philipsburg city .....	831
Philipsburg city (part of) .....	445
Stone Station precinct .....	148
Sunrise precinct .....	43
<b>JEFFERSON COUNTY</b> <sup>13</sup> .....	<b>5,330</b>
Township No. 3.....	930
Township No. 4.....	651
Township No. 5.....	685
Township No. 6.....	327
Township No. 7.....	882
Township No. 8.....	178
Township No. 9.....	108
Township No. 11.....	66
Township No. 12.....	1,503
<b>LEWIS AND CLARKE COUNTY</b> <sup>14</sup> .....	<b>19,171</b>
Belmont township .....	2,747
Helena city, in township 10, north, ranges 3 and 4, west .....	10,770
Ward 1.....	1,393
Ward 2.....	950
Ward 3.....	1,078
Ward 4.....	1,260
Ward 5.....	1,620
Ward 6.....	1,510
Ward 7.....	2,959
Township 8, north, range 5, west (fractional) .....	41
Township 8, north, range 6, west (fractional) .....	(5)
Township 9, north, range 3, west (fractional) .....	5
Township 9, north, range 4, west (fractional) .....	103
Township 9, north, range 5, west.....	84
Township 9, north, range 6, west (fractional) .....	39
Township 10, north, range 1, west (fractional) .....	107
Township 10, north, range 2, west .....	298
Township 10, north, range 3 west, exclusive of part of Helena city.....	1,614
Township 10, north, range 4 west, exclusive of part of Helena city .....	537
Township 10, north, range 5, west (fractional) .....	322
Township 10, north, range 6, west (fractional).....	(5)
Township 11, north, range 1, east.....	45
Township 11, north, range 1 west .....	130
Township 11, north, range 2, west (fractional) .....	103
Township 11, north, range 3, west .....	150
Township 12, north, range 1, west .....	34

MINOR AND CIVIL DIVISIONS.		1900.
Township 12, north, range 2, west (fractional) .....	23	
Township 12, north, range 3, west .....	6	
Township 12, north, range 4, west .....	32	
Township 13, north, range 2, west .....	7	
Township 13, north, range 3, west .....	14	
Township 13, north, range 4, west .....	60	
Township 13, north, range 5, west .....	40	
Township 13, north, range 6, west .....	16	
Township 13, north, range 7, west (fractional) .....	10	
Township 13, north, range 9, west .....	9	
Township 14, north, range 2, west .....	38	
Township 14, north, range 3, west (fractional) .....	13	
Township 14, north, range 4, west .....	18	
Township 14, north, range 6, west .....	25	
Township 14, north, range 7, west .....	48	
Township 14, north, range 8, west .....	19	
Township 14, north, range 9, west .....	83	
Township 15, north, range 2, west .....	11	
Township 15, north, range 3, west (fractional) .....	161	
Township 15, north, range 4, west .....	137	
Township 15, north, range 5, west .....	14	
Township 15, north, range 6, west .....	55	
Township 15, north, range 7, west .....	18	
Township 15, north, range 8, west .....	6	
Township 16, north, range 3, west .....	27	
Township 16, north, range 4, west .....	66	
Township 16, north, range 5, west .....	27	
Township 16, north, range 9, west .....	18	
Township 17, north, range 3, west (fractional) .....	49	
Township 17, north, range 4, west .....	14	
Township 17, north, range 5, west .....	27	
Township 17, north, range 6, west .....	74	
Township 18, north, range 4, west .....	10	
Township 18, north, range 5, west .....	46	
Township 18, north, range 6, west .....	83	
Township 18, north, range 7, west .....	70	
Township 19, north, range 4, west .....	15	
Township 19, north, range 5, west .....	30	
Township 19, north, range 6, west .....	49	
Township 19, north, range 7, west .....	75	
Township 19, north, range 8, west (fractional) .....	27	
Township 20, north, range 4, west (fractional) .....	28	
Township 20, north, range 5, west (fractional) .....	39	
Township 20, north, range 6, west .....	186	
Township 20, north, range 7, west .....	30	
Township 20, north, range 8, west .....	45	
Township 21, north, range 6, west (fractional) .....	(5)	
Township 21, north, range 7, west (fractional) .....	23	
Unsurveyed territory north of 4th Standard Parallel Line .....	68	
MADISON COUNTY <sup>15</sup> .....	7,695	
Sheridan town .....	581	
Virginia City .....	568	
MEAGHER COUNTY <sup>16</sup> .....	2,526	
Belt township .....	313	
Berceil precinct .....	32	
Big Elk precinct .....	161	
Brewer township, including White Sulphur Springs town .....	925	
White Sulphur Springs town .....	446	
Castle Mountain township .....	332	
Martinsdale precinct .....	45	
Musselshell precinct .....	573	
Oka precinct .....	28	
Winnecook precinct .....	107	
MISSOULA COUNTY <sup>17</sup> .....	13,964	
Cedar township .....	1,508	
Frenchtown township .....	1,249	
Hellgate township, including Missoula city .....	7,751	
Missoula city .....	4,366	
Ward 1 .....	977	
Ward 2 .....	1,111	



MINOR AND CIVIL DIVISIONS.		1900.
Ward 3....	499	
Ward 4....	1,720	
Not located in wards..	39	
Jocko township .....		667
Smead township <sup>10</sup> .....		146
Thompson township <sup>10</sup> .....		514
Flathead Indian reservation (part of) .....		2 129
(For total see Flathead county)		
PARK COUNTY <sup>18</sup> .....		7,341
Precinct 1, comprising ward 1 of Livingston city .....		1,034
Total for Livingston city, co-extensive with precincts 1, 2, and 3... ..		2,778
Ward 1.....	1,034	
Ward 2.....	720	
Ward 3.....	1,024	
Precinct 2, comprising ward 2 of Livingston city .....		720
Precinct 3, comprising ward 3 of Livingston city .....		1,024
Precinct 4, Cokedale..		73
Precinct 5, Fridley .....		207
Precinct 6, Tom Miner Basin .....		100
Precinct 7, Horr.....		359
Precinct 8, Aldridge .....		643
Precinct 9, Cinabar .....		94
Precinct 9, Cinnabar .....		153
Precinct 11, Cooke .....		49
Precinct 12, Jardine .....		378
Precinct 13, Chico .....		200
Precinct 14, South Cascade .....		111
Precinct 15, Richland .....		124
Precinct 16, Trail Creek..		284
Precinct 17, Lower Mission .....		171
Precinct 18, Upper Mission .....		94
Precinct 19, West Boulder .....		77
Precinct 20, Contact .....		77
Precinct 21, Hunters Hot Springs .....		292
Precinct 22, Shields River .....		463
Precinct 23, Cottonwood ..		133
Precinct 24, Myersburg ..		130
Precinct 25, Murphy .....		64
Precinct 26, Muir .....		59
Precinct 27, Lat .....		43
Precinct 28, North Cascade .....		185
RAVALLI COUNTY <sup>19</sup> .....		7,822
Hamilton town .....		1,257
Stevensville town .....		346
Victor town .....		136
SILVER BOW COUNTY <sup>20</sup> .....		47,635
Township 1, Walkerville, including Walkerville city ..		2,905
Walkerville city.....		2,621
Ward 1.....	736	
Ward 2.....	782	
Ward 3.....	1,103	
Township 2, Meaderville .....		1,835
Township 3, Red Mountain..		524
Township 4, German .....		587
Township 5, Silver Bow, including wards 1, 2, 3, 4, 5, 6 and parts of wards 7 and 8 of Butte City .....		36,195
Butte city (part of) .....		28,033
Total for Butte city, in townships 5 and 6.....		30,470
Ward 1.....	2,190	
Ward 2.....	4,258	
Ward 3.....	4,211	
Ward 4.....	2,146	
Ward 5.....	3,927	
Ward 6.....	2,974	
Ward 7.....	4,899	
Ward 8.....	5,865	
Township 6, South Butte, including parts wards 7 and 8 of Butte City...		5,589
Butte City (part of) .....		2,437

MINOR AND CIVIL DIVISIONS.		1900.
SWEET GRASS COUNTY <sup>21</sup> .....		3,086
Big Timber township .....		1,629
Melville township .....		732
Stillwater township .....		725
TETON COUNTY <sup>22</sup> .....		5,080
Choteau township .....		1,489
Dupuyer township .....		724
Marias township .....		500
St. Mary township .....		111
Blackfeet Indian reservation .....		2,256
VALLEY COUNTY <sup>23</sup> .....		4,355
Culbertson township.. ..		262
Glasgow township .....		1,078
Malta township .....		650
Saco township .....		313
Springdale township .....		106
Fort Peck Indian reservation .....		1,946
YELLOWSTONE COUNTY <sup>24</sup> .....		6,212
Canyon Creek precinct .....		374
Columbus precinct .....		430
Fairview precinct .....		99
Junction precinct .....		147
Laurel precinct .....		368
Musselshell precinct .....		233
North Billings precinct, including wards 1 and 2 of Billings city .....		1,877
Billings city (part of).....		1,601
Total for Billings city, in North and South Billings precincts .....		3,221
Ward 1.....	851	
Ward 2.....	750	
Ward 3.....	763	
Ward 4.....	852	
Park City precinct .....		433
Roundup precinct .....		57
South Billings precinct, including wards 3 and 2 of Billings city .....		1,877
Billings city (part of).....		1,620
Thomas Ranch precinct .....		50
Upper Musselshell precinct .....		85
CROW INDIAN RESERVATION <sup>25</sup> .....		2,660

1 Comparison with population for 1890 can not be made; information as to changes in minor civil divisions incomplete.

2 Organized from parts of Jefferson and Meagher counties in 1897.

3 Organized from parts of Park and Yellowstone counties in 1895.

4 Part of Meagher county annexed since 1890. Comparison with population for 1890 can not be made; information as to changes in minor civil divisions incomplete.

5 Part taken to form Teton county in 1893. Not returned by townships in 1890.

6 Not returned by townships or precincts.

7 Part taken to form Valley county in 1893. Not returned by townships in 1890.

8 Part taken to form Granite county in 1893 and parts annexed to Flathead and Lewis and Clarke counties since 1890. Not returned by townships in 1890.

9 Not returned by districts in 1890.

10 Organized from part of Missoula county in 1893; part of Deer Lodge county subsequently annexed.

11 Comparison with population for 1890 can not be made; county redistricted since 1890.

12 Organized from part of Deer Lodge county in 1893.

13 Includes part of Upper Flint Creek valley and Red Rock county, from Hoggback to Moose Lake

14 Part taken to form part of Broadwater county in 1897. Comparison with population for 1890 can not be made; county re-districted since 1890.

15 Parts of Deer Lodge and Meagher counties annexed since 1890. Comparison with population for 1890 can not be made; information as to changes in minor civil divisions incomplete.

(5) No population returned

16 Not returned by townships or precincts.

17 Parts taken to form part of Sweet Grass county in 1895 and part of Broadwater county in 1897; parts annexed to Cascade and to Lewis and Clarke counties since 1890. Not returned by townships or precincts in 1890.

19 Corvallis and Flathead townships taken to form Flathead county, and Skalkaho and Stevens townships taken to form Ravalli county in 1893.

10 Smead township organized from part of Thompson township since 1890.

18 Parts taken to form parts of Carbon and Sweet Grass counties in 1895. Comparison with population for 1890 can not be made; information as to changes in minor civil divisions incomplete.

19 Organized from part of Missoula county in 1893. Not returned by townships or precincts.

20 Not returned by townships in 1890.

21 Organized from parts of Meagher, Park and Yellowstone counties in 1895.

22 Organized from part of Choteau county in 1893.

23 Organized from part of Dawson county in 1893.

24 Parts taken to form parts of Carbon and Sweet Grass counties in 1895. Comparison with population of 1890 can not be made; information as to changes in minor civil divisions incomplete.

25 Not a part of any county.

There are 26 incorporated cities, towns and villages in Montana, for which the population in 1900 is separately returned, and these incorporated places are presented in table 5 in alphabetical order, being abstracted from table 4, in which they are presented in detail under the counties in which they are severally situated.

TABLE NO. 5.—POPULATION OF THE INCORPORATED CITIES, TOWNS AND VILLAGES OF MONTANA, 1890 AND 1900.

Cities, Towns and Villages.	Population		Cities, Towns and Villages.	Population	
	1900.	1890.		1900.	1890.
Anaconda city . . . . .	9,453	3,975	Livingston city . . . . .	2,778	2,850
Billings city . . . . .	3,221	836	Miles City . . . . .	1,938	956
Bozeman city . . . . .	3,419	2,143	Missoula city . . . . .	4,366	3,426
Butte city . . . . .	30,470	10,723	Neihart town . . . . .	833	.....
Deer Lodge town . . . . .	1,324	1,463	Phillipsburg city . . . . .	995	1,058
Dillon city . . . . .	1,530	1,012	Red Lodge town . . . . .	2,152	624
Fort Benton town . . . . .	1,024	624	Sheridan town . . . . .	581	207
Great Falls city . . . . .	14,930	3,979	Stevensville town . . . . .	346	.....
Hamilton town . . . . .	1,257	.....	Townsend town . . . . .	446	245
Havre town . . . . .	1,033	.....	Victor town . . . . .	139	.....
Helena city . . . . .	10,770	13,834	Virginia City . . . . .	568	675
Kalispell city . . . . .	2,526	.....	Walkerville city . . . . .	2,621	1,743
Lewistown village . . . . .	1,096	.....	White Sulphur Springs . . . . .	446	640

Of the above named 26 incorporated places 15 have less and 11 have more than 2,000 inhabitants. Of the latter the 4 largest cities are Butte, with 30,470; Great Falls with 14,930; Helena, with 10,770; and Anaconda, with 9,453 inhabitants.

## County Officials

### LIST OF COUNTY OFFICIALS OF BEAVERHEAD COUNTY.

Office.	Name and Politics.	Address.
District Judge .....	M. H. Parker, Democrat .....	Boulder.
Sheriff .....	Chas. H. Padley, Democrat .....	Dillon.
Treasurer .....	Geo. Edinger, Democrat .....	Dillon.
County Clerk and Recorder .....	Wm. L. Staudaher, Democrat .....	Dillon.
County Assessor .....	Chas. W. Conger, Republican .....	Dillon.
Clerk of District Court .....	Geo. W. French, Democrat .....	Dillon.
County Attorney .....	Joseph B. Poindexter, Democrat, .....	Dillon.
Sup't. of Public Schools .....	Isabelle Rife, Democrat .....	Dillon.
County Coroner .....	James L. Jones, Democrat .....	Dillon.
Public Administrator .....	Al E. Graeter, Democrat .....	Dillon.
County Surveyor .....	Geo. R. Metlen .....	Dillon.
County Commissioners .....	T. F. Barrett .....	Grant.
	Alvin Anderson .....	Dillon.
	Wm. Montgomery .....	Wisdom.
State Senator .....	James P. Murray, Democrat .....	Dillon.
Members of House of Representatives..	David E. Metlen, Democrat .....	Dillon.
	Emerson Hill, Democrat. ....	Red Rock.

The County Commissioners elected November 6th, 1900, who take office January 1st, 1900, are David McKnight, Democrat, Dell; Wason M. Oliver, Democrat, Dillon; Wm. Montgomery, Democrat, Dillon.

Justices of the Peace: Chas. Hirschman, Dillon; Thos. Judge, Polaris; J. A. Clinton, Lima; Sam'l. Jagers, Grant; H. Just, Lima.

### LIST OF COUNTY OFFICIALS OF BROADWATER COUNTY.

Office.	Name and Politics.	Address.
District Judge .....	Wm. L. Holloway, Republican .....	Bozeman.
Sheriff .....	G. E. Poole, Democrat .....	Townsend.
Treasurer .....	M. Gurnett, Democrat .....	Townsend.
County Clerk and Recorder .....	B. S. Coad, Democrat .....	Townsend.
Assessor .....	Charles Dogget, Democrat .....	Townsend.
Clerk of District Court .....	Fred Bubser, Democrat .....	Townsend.
County Attorney .....	E. H. Goodman, Democrat .....	Townsend.
Sup't. of Public Schools .....	Eva Harrington, Democrat .....	Townsend.
Coroner .....	Charles Malone, Democrat .....	Winston.
Public Administrator .....	Elmer Lytle, Democrat .....	Winston.
County Surveyor .....	Frank L. Currie, Democrat .....	Townsend.
County Commissioners .....	E. P. Durnen, .....	Winston.
	W. W. Harvey .....	Townsend.
	B. F. Bembrick .....	Toston.
State Senator .....	W. E. Tierney, Democrat .....	Townsend.
Members of House of Representatives..	Lloyd Cannon, Democrat .....	Winston.
	A. B. Rossman, Democrat .....	Radersburg.

Justices of the Peace: H. L. Keene, Canton; C. W. Reynolds, Winston.



## LIST OF COUNTY OFFICIALS OF CARBON COUNTY.

Office.	Name and Politics.	Address.
District Judge .....	Frank Henry, Republican .....	Livingston.
Sheriff .....	M. W. Potter Republican .....	Red Lodge.
Treasurer .....	C. E. Wright, Republican .....	Red Lodge.
County Clerk and Recorder .....	Jesse Smith, Republican .....	Red Lodge.
Assessor .....	W. R. Crockett, Republican .....	Red Lodge.
Clerk of District Court .....	E. E. Esselstyn, Republican .....	Red Lodge.
County Attorney .....	S. O. Casswell, Republican .....	Red Lodge.
Sup't. of Public Schools .....	Miss Martha Dilworth, Republican.....	Red Lodge.
County Coroner .....	Dr. B. B. Kelley, Republican .....	Red Lodge.
Public Administrator .....	David Smethurst, Republican .....	Red Lodge.
County Surveyor .....	F. W. Hine, Republican .....	Red Lodge.
County Commissioners .....	W. F. Tincom .....	Red Lodge.
	Harry Duffield .....	Joliet.
	John Mulherin .....	Absarokee.
State Senator .....	W. F. Meyer, Republican .....	Red Lodge.
Members of House of Representatives..	C. H. Gregory, Republican .....	Gebo.

The County Commissioners elected November 6th, 1900, and who will take office on January 1st, 1902, are J. J. Frank, Republican; W. B. Nutting, Republican; H. J. Smith, Republican.

Justices of the Peace: David Hawthorne, Red Lodge; Edward Morgan, Red Lodge; H. E. Wolfe, Gebo; Rodney Stone, Bridger; Henry Williams, Bridger; William Reno Bridger; John Lindsay, Carbonado; Chas. Oliver, Joliet; R. O. Morris, Absarokee; John W. Brown, Absarokee; M. O. Magee, Absarokee; Harry Ellis, Absarokee.

## LIST OF COUNTY OFFICIALS OF CASCADE COUNTY.

Office.	Name and Politics.	Address.
District Judge .....	J. B. Leslie, Democrat .....	Great Falls.
Sheriff .....	H. E. Benner, Democrat .....	Great Falls.
Treasurer .....	O. F. Wadsworth, Jr., Democrat .....	Great Falls.
County Clerk and Recorder .....	Natent Fortune, Democrat .....	Great Falls.
Assessor .....	Vin McGiffin, Republican .....	Great Falls.
Clerk of District Court .....	J. T. Athey, Republican .....	Great Falls.
County Attorney .....	A. C. Gormley, Democrat .....	Great Falls.
Sup't. of Public Schools .....	Martha A. Kearns, Democrat .....	Belt.
Auditor .....	John Carr, Democrat .....	Great Falls.
Coroner .....	C. T. Sweeney, Democrat .....	Great Falls.
Public Administrator .....	R. W. Hanson, Democrat .....	Great Falls.
County Surveyor .....	O. C. Mortson, Democrat .....	Great Falls.
County Commissioners .....	John J. Patterson .....	Great Falls.
	B. P. McNair .....	Great Falls.
	James Erickson .....	Great Falls.
State Senator .....	Geo. H. Stanton, Democrat .....	Great Falls.
Members of House of Representatives..	S. R. Jensen, Populist .....	Great Falls.
	Thos. F. Richardson, Populist .....	Great Falls.
	Geo. R. Woods, Democrat .....	Great Falls.
	Chas. H. Conner, Labor .....	Belt.
	R. P. Thoroughman, Democrat .....	Cascade.

The County Commissioners elected November 6th, 1900, and who will take office January 1st, 1902, are W. D. Delphy, Democrat, Monarch; Louis Roalswick, Republican, Neihart; F. D. Cooper, Republican, Cascade.

Justices of the Peace: W. H. Race, Great Falls; W. H. Safford, Great Falls; Frank Warner, Cascade; Luther Mills, Neihart; B. P. Fitzpatrick, Neihart; W. F. Oden, Neihart; D. J. Dolsen, Stockett; T. W. McKeown, Stockett; J. J. G. Burns, Belt; M. Foley, Belt; E. Nebel, Kibbey; W. Gunn, Kibbey.

Townships same as addresses.

## LIST OF COUNTY OFFICIALS OF CHOTEAU COUNTY.

Office.	Name and Politics.	Address.
District Judge .....	Edwin K. Cheadle, Republican .....	Lewistown.
Sheriff .....	Thos. Clary, Fusion .....	Fort Benton
Treasurer .....	D. G. Lockwood, Republican .....	Fort Benton
County Clerk and Recorder .....	E. Frank Sayre, Republican .....	Fort Benton
Assessor .....	John C. Sullivan, Republican .....	Fort Benton
Clerk of District Court .....	Chas. H. Boyle, Republican .....	Fort Benton
County Attorney .....	Chas. N. Pray, Republican .....	Fort Benton
Sup't. of Public Schools .....	Miss May Flanagan, Republican .....	Fort Benton
Coroner .....	C. F. Hopkins, Republican .....	Chinook.
Public Administrator .....	W. O. Dexter, Republican .....	Fort Benton
County Surveyor .....	A. W. Merrifield, Republican .....	Chinook.
County Commissioners .....	Geo. F. Lewis .....	Fort Benton
	J. D. Thompson .....	Havre.
	Chas. A. Smith .....	Harlem.
State Senator .....	Benj. D. Phillips, Republican .....	Phillips.
Members of the Legislature .....	George B. Bourne, Republican .....	Hill.
	John F. Patterson, Republican .....	Fort Benton

County Commissioners elected November 6th, 1900, who take office on January 1st, 1902, are Geo. F. Lewis, Republican, Fort Benton; A. H. Reser, Republican, Chinook; W. E. French, Republican, Harlem.

Justices of the Peace: Jere Sullivan, Fort Benton; Henry J. Meili, Havre; Manning, Landusky; John T. Throop, Landusky; Maurice C. Price, Hill; John Manning, Sandusky; John T. Throop, Sandusky; Maurice C. Price, Hill; John McDowell, Gold Butte.

## LIST OF COUNTY OFFICIALS OF CUSTER COUNTY.

Office.	Name and Politics.	Address.
District Judge .....	C. H. Loud, Republican .....	Miles City.
Sheriff .....	W. E. Savage, Republican .....	Miles City.
Treasurer .....	J. R. McKay, Republican .....	Miles City.
County Clerk and Recorder .....	A. H. Swerdfiger, Republican .....	Miles City.
Assessor .....	E. F. Crosby, Republican .....	Miles City.
County Attorney .....	J. H. Johnson, Republican .....	Miles City.
Clerk of District Court .....	A. T. McAusland, Republican .....	Miles City.
Sup't. of Public Schools .....	Laura Zook, Democrat .....	Miles City.
Coroner .....	Joseph Bateman, Republican .....	Miles City.
Public Administrator .....	H. B. Twombly, Republican .....	Miles City.
County Surveyor .....	George Scheets, Democrat .....	Miles City.
County Commissioners .....	Joseph E. Farnum .....	Miles City.
	Arthur Bitle .....	Miles City.
	Robert G. Wear .....	Ekalaka.
State Senator .....	Kenneth McLean, Republican .....	Miles City.
Members of House of Representatives..	E. S. Becker, Republican .....	Forsyth.
	C. D. Newbary, Republican .....	Ekalaka.

The County Commisioners elected November 6th, 1900, and who take office January 1st, 1902, are M. G. Maples, Republican; J. W. Stith, Republican, and C. S. Bull, Republican.

Justices of the Peace: A. W. Kennie, Miles City; Emil Bircher, Miles City; E. M. Huff, Forsyth; C. C. Gates, Forsyth; Wm. Bray, Sr., Rosebud; A. B. Snow, Terry; Amos Lambert, Sr., Ekalaka; Sam'l. Clem, Alzada; W. A. Armstrong, Midland.

## LIST OF COUNTY OFFICIALS OF DAWSON COUNTY.

Office.	Name and Politics.	Address.
District Judge .....	C. H. Loud, Republican .....	Miles City.
Sheriff .....	John Kennedy, Republican .....	Glendive.
Treasurer .....	Hope S. Davis, Republican .....	Glendive.
County Clerk and Recorder .....	R. L. Wyman, Republican .....	Glendive.
Assessor .....	Anton H. Johnson, Republican .....	Glendive.
Clerk of District Court .....	James Rivenes, Republican .....	Glendive.
County Attorney .....	Thomas C. Holmes, Republican .....	Glendive.
Sup't. of Public Schools .....	Grace Skinner, Republican .....	Glendive.
Coroner .....	S. J. Washington, Republican .....	Glendive.
Public Administrator .....	Wm. Lowe, Republican .....	Glendive.
County Surveyor .....	R. R. Cummins, Republican .....	Glendive.
County Commissioners .....	C. L. Brown .....	Glendive.
	Chas. R. Noble .....	Glendive.
	Alex. M. Baird .....	Wibaux.
State Senator .....	T. P. Cullen, Democrat .....	Glendive.
Member of House of Representatives...	Geo. McCone, Republican .....	Tonka.

County Commisisoners elected November 6th, 1900, who will take office on January 1st, 1902, are J. A. Morton, Republican; W. C. Gleason, Republican, and A. M. Baird, Republican.

Justices of the Peace: John Gillis, Glendive; J. H. Ray, Jr., Glendive; John Brophy, Wibaux; H. R. Green, Wibaux; C. T. Stanhope, Sidney; A. A. Frederickson, Tonka.

## LIST OF COUNTY OFFICIALS OF DEER LODGE COUNTY.

Office.	Name and Politics.	Address.
District Judge .....	Wellington Napton, Democrat .....	Anaconda.
Sheriff .....	Jack Conley, Democrat .....	Anaconda.
Treasurer .....	P. D. Twohy, Democrat .....	Anaconda.
County Clerk and Recorder .....	Phillip Greenan, Democrat .....	Anaconda.
Assessor .....	Geo. S. Miller, Democrat .....	Anaconda.
Clerk of Court .....	Wm. E. Thomas, Republican .....	Anaconda.
County Attorney .....	J. H. Duffy, Democrat .....	Anaconda.
Sup't. of Schools .....	Mary McLaughlin, Democrat .....	Anaconda.
Auditor .....		
Coroner .....	Joseph Hughes, Democrat .....	Anaconda.
Administrator .....	J. Y. Batterton, Democrat .....	Deer Lodge.
Surveyor .....	W. E. Pinegar, Democrat .....	Anaconda.
County Commissioners .....	A. M. Walker, Democrat .....	Anaconda.
	James W. Geary, Democrat .....	Helmville.
	T. C. Davidson, Republican .....	Anaconda.
State Senator .....	J. M. Kennedy, Fusion .....	Anaconda.
Members of House of Representatives..	John R. Toole, Democrat .....	Anaconda.
	Thomas McTague, Democrat .....	Deer Lodge.
	J. M. Madden, Democrat .....	Anaconda.
	Michael Geary, Democrat .....	Helmville.
	Joseph E. McDonnell, Democrat .....	Anaconda.
	John Bielenberg, Republican .....	Deer Lodge.

County Commissioners elected November, 6th, 1900, who take office on January 1st, 1902, are James W. Geary, Democrat; Wm. Kelliher, Democrat, and Henry B. Hoffman, Republican.

Justices of the Peace: Frank Kennedy, Anaconda; James Quane, Anaconda; Orren Emerson, Deer Lodge; W. L. Powell, Deer Lodge.

## LIST OF COUNTY OFFICIALS OF FERGUS COUNTY.

Office.	Name and Politics.	Address.
District Judge .....	Edwin K. Cheadle, Republican .....	Lewistown.
Sheriff .....	Thomas M. Shaw, Democrat .....	Lewistown.
Treasurer .....	James M. Croft, Republican .....	Lewistown.
County Clerk and Recorder .....	Chas. M. Kelley, Republican .....	Lewistown.
Assessor .....	Donald Fowler, Republican .....	Lewistown.
Clerk of District Court .....	Edmund Wright, Republican .....	Lewistown.
County Attorney .....	Oliver W. Belden, Republican .....	Lewistown.
Sup't. of Public Schools .....	Elizabeth S. Peebles, Republican .....	Lewistown.
Coroner .....	O. F. David, Republican .....	Utica.
Public Administrator .....	Wm. T. McFarland, Republican .....	Lewistown.
County Surveyor .....	Geo. M. Stafford, Republican .....	Lewistown.
County Commissioners .....	Samuel Phillips .....	Lewistown.
	Jacob S. Corbly .....	Lewistown.
	Daniel W. Slayton .....	Folsom.
State Senator .....	Simeon S. Hobson, Republican .....	Utica.
Members of House of Representatives..	Wyllis A. Hedges, Republican .....	Yale.
	Alex. B. Lehman, Republican .....	Lewistown.

The County Commissioners elected November 6th, 1900, and who will take office on January 1st, 1902, are Wm. T. Neill, Republican, Garneill; Samuel Phillips, Republican, Lewistown, and Jas. B. Washburn, Republican, Gilt Edge.

Justices of the Peace: O. W. Metcalf and John Bohslet, Dubuque; William Jackson and J. S. Phillips, Utica; D. S. Lutz and W. H. Barney, Garneill; F. F. Mac Gowan, Robert Gudge, Lewistown; Orlando Sawyer, Gilt Edge; C. B. Wallace, Musselshell; J. G. Sherman, Flat Willow.

## LIST OF COUNTY OFFICIALS OF FLATHEAD COUNTY.

Office.	Name and Politics.	Address.
District Judge .....	D. F. Smith, Democrat .....	Kalispell.
Sheriff .....	Thomas C. Hand, Democrat .....	Kalispell.
Treasurer .....	Sam Hilburn, Democrat .....	Kalispell.
County Clerk and Recorder .....	August Lagoni, Democrat .....	Kalispell.
Assessor .....	Andrew Dunsire, Democrat .....	Kalispell.
Clerk of Court .....	James K. Lang, Democrat .....	Kalispell.
County Attorney .....	R. L. Oliver, Democrat .....	Columbia Falls.
Sup't. of Public Schools .....	Fannie L. Spurck, Democrat .....	Kalispell.
Coroner .....	Nelson Willoughby, Republican ..	Columbia Falls.
Administrator .....	J. J. Kennedy, Democrat .....	Columbia Falls.
Surveyor .....	Burton S. Adams, Republican .....	Kalispell.
County Commissioners .....	David Greig .....	Kalispell.
	W. H. Griffin .....	Kalispell.
	H. O. Christensen .....	Kalispell.
State Senator .....	J. H. Geiger, Republican .....	Kalispell.
Members of House of Representatives..	W. G. Fitzpatrick, Democrat .....	Columbia Falls.
	B. J. McIntire, Republican .....	Kalispell.
	L. H. Faust, Republican .....	Libby.

No County Commissioners elected.

Justices of the Peace: M. J. Sullivan, Jacob Billings, O. G. Cornish, Kalispell; W. H. Meyers, Thomas Carroll and Henry Miller, Columbia Falls; J. W. Frost and George Copeland, Tobacco; P. H. Dempsey, Dayton; H. Bockman and C. R. Hoffman, Libbey; W. A. Raymond and George A. Davis, Troy.



## LIST OF COUNTY OFFICIALS OF GALLATIN COUNTY.

Office.	Name and Politics.	Address.
District Judge .....	Wm. M. Holloway, Republican .....	Bozeman.
Sheriff .....	Thomas J. Fowler, Republican .....	Bozeman.
Treasurer .....	W. H. Davis, Democrat .....	Bozeman.
County Clerk and Recorder .....	E. V. Blankenship, Democrat .....	Bozeman.
Assessor .....	David S. McLoud, Democrat .....	Bozeman.
Clerk of District Court .....	Charles B. Anderson, Republican .....	Bozeman.
County Attorney .....	George D. Pease, Republican .....	Bozeman.
Sup't. of Public Schools .....	Mary E. Chrisman, Democrat .....	Bozeman.
Coroner .....	Robert R. Finley, Democrat .....	Bozeman.
Public Administrator .....	Josephus P. Martin, Democrat .....	Bozeman.
County Surveyor .....	C. M. Thorpe, Democrat .....	Bozeman.
County Commissioners .....	Geo. W. Ellis .....	Bozeman.
	J. L. Patterson .....	Bozeman.
	Don Cameron .....	Belgrade.
	C. W. Hoffman, Democrat .....	Bozeman.
	James E. Martin, Democrat .....	Bozeman.
State Senator .....	W. A. Roland, Republican .....	Logan.
Members of House of Representatives..	Wesley C. Newton, Republican .....	Bozeman.

The County Commissioners elected November 6th, 1900, and who will take office on January 1st, 1902, are E. F. Sawyer, Democrat; Geo. E. Davis, Republican, and Thomas S. Kirk, Republican.

Justices of the Peace: A. D. McPherson and W. Y. Smith, Bozeman; John J. Reese and J. G. Swetland, Belgrade; Oliver Scow and Peter Van Dyken, Manhattan; Owen E. Thomas, Logan; Lewis Brandenburg, Willow Creek.

## LIST OF COUNTY OFFICIALS OF GRANITE COUNTY.

Office.	Name and Politics.	Address.
District Judge .....	Wellington Napton, Democrat .....	Anaconda.
Sheriff .....	George Metcalf, Fusion .....	Phillipsburg.
Treasurer .....	O. F. Featherman, Democrat .....	Drummond.
County Clerk and Recorder .....	John Neu, Fusion .....	Phillipsburg.
County Assessor .....	Thos. F. Hynes, Fusion .....	Granite.
Clerk of District Court .....	James E. Abbey, Fusion .....	Phillipsburg.
County Attorney .....	David M. Durfee, Fusion .....	Granite.
Sup't. of Public Schools .....	Maria C. Ryan, Fusion .....	Phillipsburg.
County Coroner .....	Robert W. Getty, Fusion .....	Phillipsburg.
Public Administrator .....	W. T. Allison Fusion .....	Phillipsburg.
County Surveyor .....	Charles F. Donyes, Fusion .....	Phillipsburg.
County Commissioners .....	James B. Featherman .....	Drummond.
	H. R. Campbell .....	Quigley.
	David W. Hennessey .....	Stone Station.
State Senator .....	Jerry Connolly, Populist .....	Garnett.
Members of House of Representatives..	Thomas F. Ward Democrat .....	Garnett.
	Henry Lewney, Populist .....	Granite.

## LIST OF COUNTY OFFICIALS OF JEFFERSON COUNTY.

Office.	Name and Politics.	Address.
District Judge .....	M. H. Parker, Democrat .....	Boulder.
Sheriff .....	Henry L. Sherlock, Democrat .....	Boulder.
Treasurer .....	Sherman F. Tuttle, Democrat .....	Boulder.
County Clerk and Recorder .....	Charles Scharf, Democrat .....	Boulder.
Assessor .....	John T. Murphy, Democrat .....	Boulder.
Clerk of District Court .....	A. J. Holloway, Democrat .....	Boulder.
County Attorney .....	J. H. Murphy, Democrat .....	Boulder.
Sup't. of Public Schools .....	Jennie Filcher, Republican .....	Boulder.
Coroner .....	C. A. McNulty, Democrat .....	Boulder.
Public Administrator .....	Z. N. Thompson, Democrat .....	Boulder.
County Surveyor .....	R. M. Cralle, Democrat .....	Boulder.
County Commissioners .....	W. M. Fergus .....	Whitehall.
	H. G. Smith .....	Basin.
	Edward Ryan .....	Boulder.
State Senator .....	D. G. Warner, Democrat .....	Boulder.
Members of House of Representatives..	John Berkin, Democrat .....	Boulder.
	Archibald R. McDonald, Democrat ....	Whitehall.
	Joseph B. Brien, Democrat .....	Basin.

The County Commissioners elected November 6th, 1900, who will take office on January 1st, 1902, are Edward Ryan, Democrat, Boulder; A. H. Moulton, Democrat, Jefferson City, and Wm. Fergus, Democrat, Whitehall.

Justices of the Peace: W. T. Sweet, Boulder; H. O. Johnson and D. A. Righenour, Basin; Wm. B. Redding, Clancy; David Miller, Woodville; Edwin Cooley, Whitehall.

## LIST OF COUNTY OFFICIALS OF LEWIS AND CLARKE COUNTY.

Office.	Name and Politics.	Address.
District Judges .....	Henry C. Smith, Democrat .....	Helena.
	J. M. Clements, Populist .....	Helena.
Sheriff .....	Jefferson O'Connell, Democrat ....	Helena.
Treasurer .....	Wm. L. Steele, Democrat .....	Helena.
County Clerk and Recorder .....	Sidney Miller, Democrat .....	Helena.
County Assessor .....	Chas. H. Martien, Populist .....	Helena.
County Attorney .....	Odell W. McConnell, Democrat ....	Helena.
Clerk of District Court .....	Finlay McRae, Democrat .....	Helena.
Sup't. of Public Schools .....	Miss Ida Fullerton, Republican ....	Helena.
County Auditor .....	Daniel Sweeney, Democrat .....	Helena.
County Coroner .....	Dr. Ben C. Brooke, Democrat .....	Helena.
Public Administrator .....	B. H. Foley, Democrat .....	Helena.
County Surveyor .....	T. S. Hinsdale, Democrat .....	Helena.
County Commissioners .....	E. Beach .....	Helena.
	W. B. Hundley .....	Helena.
	John Larson .....	Helena.
State Senator .....	Wm. M. Biggs, Democrat .....	Helena.
Members of House of Representatives..	John Baker, Democrat .....	Helena.
	T. D. Sullivan, Democrat .....	Marysville.
	W. J. Hartwig, Democrat .....	Helena.
	J. H. Urquhart, Democrat .....	Helena.
	H. L. Cram, Democrat .....	Helena.
	F. S. Sanden, Populist .....	Helena.
	F. H. Donaldson, Democrat .....	East Helena.

County Commissioners elected November 6th, 1900, and who take office on January 1st, 1902, are W. O. Hutchinson, Democrat; W. B. Hundley, Democrat; F. J. Wegner, Democrat.

## LIST OF COUNTY OFFICIALS OF MADISON COUNTY.

Office.	Name and Politics.	Address.
District Judge. ....	M. H. Parker, Democrat .....	Boulder.
Sheriff .....	Jas. Summers, Democrat .....	Virginia City.
Treasurer .....	C. H. Buford, Democrat .....	Virginia City.
County Clerk and Recorder ..	H. E. Steffens, Republican .....	Virginia City.
County Assessor .....	A. B. Thurgood, Democrat .....	Virginia City.
Clerk of District Court .....	Jas. G. Walker, Democrat .....	Virginia City.
County Attorney .....	M. M. Duncan, Democrat .....	Virginia City.
Sup't. of Public Schools .....	Julia Donegan, Democrat .....	Virginia City.
County Coroner .....	T. J. Lowman, Democrat .....	Virginia City.
Public Administrator .....	S. V. Stewart, Democrat .....	Virginia City.
County Surveyor .....	Newton Orr, Democrat .....	Virginia City.
County Commissioners .....	Pat Carney, Democrat .....	Parrott.
	M. Elsler .....	Sheridan.
	C. B. Varney .....	Ennis.
State Senator .....	W. A. Clark, Ind., Democrat .....	Virginia City.
Members of House of Representatives..	B. J. Fine, Democrat .....	Virginia City.
	Geo. F. White, Democrat .....	Twin Bridges.
	Eli S. Adkins, Democrat .....	Pony.

County Commissioners elected November 6th, 1900, who take office January 1st, 1902, are O. B. Varney, Democrat, Ennis; E. D. Marsh, Republican, Sheridan, and R. N. Hawkins, Democrat, Norris.

Justices of the Peace: N. D. Johnson, Democrat, Virginia City; J. E. Dickey, Democrat, Rochester; W. R. Macfadden, Republican, Pony; Robt. Hedge, Democrat, Meadow Creek; Levi Shambow, Republican, Monida; W. A. Means, Republican, Sheridan.

## LIST OF COUNTY OFFICIALS OF MEAGHER COUNTY.

Office.	Name and Politics.	Address.
District Judge .....	Wm. L. Holloway, Republican .....	Bozeman.
Sheriff. ....	C. W. Hill, Republican .....	White Sulphur Springs.
Treasurer .....	Alex. Gibson, Republican .....	White Sulphur Springs.
County Clerk and Recorder ..	G. W. Harden, Republican .....	White Sulphur Springs.
Assessor .....	Charles H. Mayn, Republican .....	White Sulphur Springs.
Clerk of Court .....	B. W. Badger, Republican .....	White Sulphur Springs.
County Attorney .....	Max Waterman, Republican .....	White Sulphur Springs.
Sup't. of Public Schools ..	Miss Lottie A. Harris, Republican .....	White Sulphur Springs.
Coroner .....	E. K. Fitzgerald .....	(Dead.)
Public Administrator .....	James T. Wood, Republican .....	White Sulphur Springs.
County Surveyor .....	D. P. Mumbrue, Republican .....	Wolsey.
County Commissioners ....	John N. Harder, Democrat .....	Castle.
	John C. Tipton, Democrat .....	White Sulphur Springs.
	Geo. F. Danzer, Republican .....	White Sulphur Springs.
State Senator .....	Elmer J. Anderson, Republican .....	White Sulphur Springs.
Members of House of	Nathan Godfrey, Republican .....	Two Dot.
Representatives .....	Charles L. Murray, Republican .....	White Sulphur Springs.

The County Commissioners elected November 6th, 1900, and who will take office on January 1st, 1902, are M. T. Grande, Republican, Castle; Chas. B. Catlin, Republican, White Sulphur Springs, and Herbert Holloway, Republican, Oka.

Justices of the Peace: J. E. Lippencott and E. G. Hartfield, White Sulphur Springs; J. S. Kelly and J. B. Whitson, Castle; Charles Palmer, Martinsdale; Ernest C. Baxter, Two Dot.

## LIST OF COUNTY OFFICIALS OF MISSOULA COUNTY.

Office.	Name and Politics.	Address.
District Judge .....	Frederick C. Webster, Republican ..	Missoula.
Sheriff .....	Clarence R. Prescott, Democrat ...	Missoula.
Treasurer .....	George C. Higgins, Democrat .....	Missoula.
County Clerk and Recorder .....	Herbert T. Wilkinson, Democrat ...	Missoula.
Assessor .....	John H. Massey, Democrat .....	Missoula.
Clerk of District Court .....	R. W. Kemp, Republican .....	Missoula.
County Attorney .....	Chas. H. Hall, Democrat .....	Missoula.
Sup't. of Public Schools .....	Kate Shelley, Democrat .....	Missoula.
Coroner .....	John Hayes, Democrat .....	Missoula.
Public Administrator .....	B. T. Nesmith, Democrat .....	Missoula.
County Surveyor .....	Wilbur Catlin, Republican .....	Missoula.
Auditor .....	James McGinniss, Democrat .....	Missoula.
County Commissioners .....	J. R. Latimer .....	Missoula.
	A. P. Tietjen .....	Missoula.
	W. B. Russell .....	Eddy.
State Senator .....	Tyler Worden, Republican .....	Missoula.
Members of House of Representatives..	Wm. Crawford, Labor .....	Clinton.
	Thos. H. Pendergrass, Labor .....	Carlton.
	Ed Donlan, Republican .....	Frenchtown.
	J. M. Dixon, Republican .....	Missoula.

County Commissioners elected November 6th, 1900, and who will take office in November, 1901, are John Bonner, Democrat, Missoula; Peter Scheffer, Democrat, Missoula, and August Hollensteiner, Republican, Lo Lo.

Justices of the Peace: W. A. Hutchens and Wm. Hayes, Missoula; E. W. Wilson and Wm. Lutton, Thompson; John Meany and L. Brooks, Plains; T. H. Smith, Nixon; W. A. Belbe, Heron; E. Rodgers, St. Regis; Wm. Streeter, Superior; L. C. Sturman and Ed Harlesty, Lathrop.

## LIST OF COUNTY OFFICIALS OF PARK COUNTY.

Office.	Name and Politics.	Address.
District Judge .....	Frank Henry, Republican .....	Livingston.
Sheriff. ....	Frank Beley, Democrat .....	Livingston.
Treasurer .....	Geo. T. Chambers, Republican .....	Livingston.
County Clerk and Recorder .....	Chas. Angus, Republican .....	Livingston.
Assessor .....	Z. H. Daniels, Republican .....	Livingston.
Clerk of District Court .....	A. C. Davis, Jr., Republican .....	Livingston.
County Attorney .....	H. J. Miller, Silver Republican .....	Livingston.
Sup't. of Public Schools .....	Mrs. Nora Colvin, Democrat .....	Livingston.
Coroner .....	S. E. Leard, Republican .....	Livingston.
Public Administrator .....	Emanuel Cameron, Democrat .....	Livingston.
County Surveyor .....	S. H. Crookes, Republican .....	Livingston.
County Commissioners .....	R. B. Kelley .....	Livingston.
	N. Ebert .....	Livingston.
	L. H. Van Dyck .....	Horr.
State Senator .....	J. M. Conrow, Democrat .....	Livingston.
Members of House of Representatives..	Benj. F. Myers, Democrat .....	Livingston.
	T. M. Swindlehurst, Democrat .....	Livingston.

County Commissioners elected November 6th, 1900, and who will take office January 1st, 1902, are N. Ebert, Democrat, Livingston; Albert Trager, Republican, Horr, and F. A. Krieger, Republican, Livingston.

Justices of the Peace: Frank Bender and Sam'l. Hasford, Livingston; M. M. Black, Fridley; J. H. Pisor, Horr; F. A. Pratt, Gardnier; Sam'l. T. Lipps. Jardine; D. Davis, Aldridge.



## LIST OF COUNTY OFFICIALS OF RAVALLI COUNTY.

Office.	Name and Politics.	Address.
District Judge .....	Frederick C. Webster, Republican.....	Missoula.
Sheriff .....	James D. Watts, Republican .....	Hamilton
Treasurer .....	Charles H. Buck, Republican .....	Hamilton.
County Clerk and Recorder .....	Howard D. Smart, Republican .....	Hamilton.
Assessor .....	Charles M. Johnson, Republican .....	Hamilton.
Clerk of District Court .....	John F. Cone, Republican .....	Hamilton.
County Attorney .....	Wm. P. Baker, Republican .....	Hamilton.
Sup't. of Public Schools .....	Kitty Ostermeyer, Populist .....	Hamilton.
Coroner .....	Wm. D. Cunningham, Republican .....	Hamilton.
Administrator .....	Jackson D. Miser, Republican .....	Hamilton.
County Surveyor .....	Louis Lacroussier, Republican .....	Hamilton.
County Commissioners .....	E. A. Johnson .....	Victor.
	J. R. Rawlins .....	Hamilton.
	W. E. Gleason .....	Florence.
State Senator .....	H. L. Myers, Ind., Democrat .....	
Members of House of Representatives..	George T. Baggs, Republican .....	Stevensville
	Aaron Conner, Republican .....	Darby.

No County Commissioners elected this year.

Justices of the Peace: J. B. Overtierf, Darby; A. H. Bradley, Grantsdale; Frank J. Morris, Hamilton; Naoman Johnsen, Cornvallis; S. Sedgwick, Stevensville; Henry Chambers, Grantsdale; Geo. W. Solleder, Darby; Van R. Woodmancy, Victor.

## LIST OF COUNTY OFFICIALS OF SWEET GRASS COUNTY.

Office.	Name and Politics.	Address.
District Judge .....	Frank Henry, Republican .....	Big Timber.
Sheriff .....	Oscar Fallang, Republican .....	Big Timber.
Treasurer .....	J. W. Geiger, Republican .....	Big Timber.
County Clerk and Recorder .....	J. H. Moore, Republican .....	Big Timber.
County Assessor .....	C. O. Hathaway, Republican .....	Big Timber.
Clerk of District Court .....	Ben M. Mjelde, Democrat .....	Big Timber.
County Attorney .....	E. M. Hall, Republican .....	Big Timber.
Sup't. of Public Schools .....	Stella Walker, Democrat .....	Big Timber.
Public Administrator .....	A. G. Yule, Republican .....	Big Timber.
County Surveyor .....	D. J. Walvoord, Republican .....	Big Timber.
County Commissioners .....	J. W. Bailey .....	Big Timber.
	R. J. McConnell .....	McLeod.
	Thos. Flanagan .....	Absarokee.
State Senator .....	J. N. Kelly, Republican .....	Hunter's Hot Springs.
Member of House of Representatives...	R. Brownlee, Republican .....	Melville.

County Commissioners elected November 6th, 1900, and who will take office on the 1st of January, 1902, are Francis Ervin, Republican; O. B. Nevin, Republican, and R. J. McConnell, Republican, all of Big Timber.

No Coroner elected.

Justices of the Peace: H. C. Pound and J. J. Cameron, Big Timber; E. H. Ellington and W. G. Strong, Melville; J. M. Lyons, Nye; B. B. Miles, McLeod.

## LIST OF COUNTY OFFICIALS OF SILVER BOW COUNTY.

Office.	Name and Politics.	Address.
District Judges .....	Wm. Clancy, Populist .....	Butte.
	Edw. W. Harney, Democrat .....	Butte.
Sheriff .....	James B. Furey, Labor .....	Butte.
Treasurer .....	James Maher, Labor .....	Butte.
County Clerk and Recorder .....	John Weston, Populist .....	Butte.
Assessor .....	Dan Brown, Populist .....	Butte.
Clerk of District Court .....	Samuel M. Roberts, Democrat .....	Butte.
County Attorney .....	Peter Breen, Populist .....	Butte.
Sup't. of Public Schools .....	Mary Mullins, Democrat .....	Butte.
Auditor .....	Alvin A. Crossman, Democrat .....	Butte.
Coroner .....	Sam P. Johnson, Labor .....	Butte.
Public Administrator .....	Jos. P. Collins, Democrat .....	Butte.
County Surveyor .....	Andrew F. Monroe, Democrat .....	Butte.
County Commissioners .....	Wm. D. Clark, Populist .....	Butte.
	Chas. G. Ferrell, Democrat .....	Butte.
	Ed. Mathews, Populist .....	Butte.
State Senator .....	Thomas F. Courtney .....	Butte.
Members of House of Representatives..	Frank E. Corbett, Democrat .....	Butte.
	Morgan P. Gilchrist, Democrat .....	Butte.
	Thos. S. Kilgallon, Democrat .....	Butte.
	John MacGinniss, Democrat .....	Butte.
	Joseph J. Meunier, Democrat .....	Butte.
	Barney Ferry, Populist .....	Butte.
	Frank J. Pelletier, Labor .....	Butte.
	Frank B. Axtell, Labor .....	Butte.
	Martin Dee, Jr., Labor .....	Butte.
	John J. Quinn, Labor .....	Butte.
	Charles Lannin, Labor .....	Butte.
	Patrick G. Sullivan, Populist .....	Butte.

The County Commissioners elected November 6th, 1900, who will take office on the 8th day of November, 1901, are Michael P. Haggerty, Labor; Wm. D. Clark, Populist, and Patrick Peoples, Populist, all of Butte.

Justices of the Peace—Silver Bow Township: John Nelson and William H. Arnold, Butte. South Butte Township: Cornelius Taylor and John Olson, Butte. Walkerville Township: Thomas Neenan and James H. Hall, Walkerville. Meaderville Township: Hiram S. Libby and Peter J. McDonald, Meaderville. Red Mountain Township: Wm. Maloney and John Moa, Melrose. German Gulch Township: Milo French and W. H. Calvert, German Gulch.

## LIST OF OFFICIALS OF TETON COUNTY.

Office.	Name and Politics.	Address.
District Judge .....	D. F. Smith, Democrat .....	Kalispell.
Sheriff .....	Geo. C. Taylor, Republican .....	Dupuyer.
Treasurer .....	John S. Gordon, Republican .....	Choteau.
County Clerk and Recorder .....	A. C. Warner, Republican .....	Choteau.
Assessor .....	Thos. O. Larson, Republican .....	Choteau.
Clerk of District Court .....	Sterling McDonald Republican .....	Choteau.
County Attorney .....	James Sulgrove, Republican .....	Choteau.
Sup't. of Public Schools .....	Fannie E. Chenowith, Republican .....	Choteau.
Coroner .....	Wm. H. Titus, Republican .....	Dupuyer.
Public Administrator .....	James H. Dunlap, Republican .....	Choteau.
County Surveyor .....	Walter Mathews, Democrat .....	Pondera.
County Commissioners .....	Wm. M. Foster .....	Choteau.
	C. B. Perkins .....	Dupuyer.
	M. Connelly .....	Shelby.
State Senator .....	Samuel L. Mitchell .....	Choteau.
Member of House of Representatives...	W. D. Jones, Republican .....	Dupuyer.

Justices of the Peace: Charles W. Cooper, Charles Parker, Marion Gleason, Thomas Cowan, William Dawes, J. M. Wilcox, Thomas E. Williamson.

## LIST OF OFFICIALS OF VALLEY COUNTY.

Office.	Name and Politics.	Address.
District Judge .....	Edwin K. Cheadle, Republican .....	Lewistown.
Sheriff .....	W. S. Griffith, Republican .....	Glasgow.
Treasurer .....	S. C. Small, Democrat .....	Glasgow.
County Clerk and Recorder .....	R. J. Crosset, Republican .....	Glasgow.
County Assessor .....	H. G. Robinson, Republican .....	Malta.
Clerk of District Court .....	John Survant, Independent .....	Malta.
County Attorney .....	John J. Kerr, Republican .....	Glasgow.
Sup't. of Public Schools .....	Carrie E. Luther Republican .....	Glasgow.
County Coroner .....	Warren O. Robbins, Republican.....	Glasgow.
Public Administrator .....	J. W. Williams, Democrat .....	Culbertson.
County Surveyor .....	Truman M. Patten, Republican .....	Glasgow.
County Commissioners .....	D. C. Kyle .....	Saco.
	S. P. Mitchell .....	Culbertson.
	H. Cosner .....	Malta.
State Senator .....	A. W. Mahon, Democrat .....	Glasgow.
Member of House of Representatives...	Walter Shanley, Republican .....	Glasgow.

Justices of the Peace: James Wilson, Andrew Davidson, Malta; W. L. Vasha, J. B. Northrup, Saco; S. Blanchard, R. H. Friedl, Glasgow; Wm. Stephens, Wm. Jackson, Culbertson

## LIST OF OFFICIALS OF YELLOWSTONE COUNTY.

Office.	Name and Politics.	Address.
District Judge .....	C. H. Loud, Republican .....	Miles City.
Sheriff .....	George W. Hubbard, Democrat .....	Billings.
Treasurer .....	Eugene S. Holmes, Republican .....	Billings.
County Clerk and Recorder .....	Nat G. Carwile, Democrat .....	Billings.
County Assessor .....	A. P. Smith, Republican .....	Billings.
Clerk of District Court .....	T. A. Williams, Democrat .....	Billings.
County Attorney .....	Fred H. Hathhorn, Republican .....	Billings.
Sup't. of Public Schools .....	Marguerite M. Strang, Republican .....	Billings.
County Coroner .....	James Chapple, Republican .....	Billings.
Public Administrator .....	Henry Terrell, Democrat .....	Billings.
County Surveyor .....	A. A. Morris, Republican .....	Billings.
County Commissioners .....	T. S. Linton, Republican .....	Billings.
	J. B. Annin, Republican .....	Columbus.
State Senator .....	Pat Lavelle, Democrat .....	Columbus.
	C. O. Gruwell, Democrat .....	Billings.
Member of House of Representatives .....	Geo. C. Stull, Republican .....	Billings.

The County Commissioners elected November 6th, 1900, are C. M. Jacobs, Democrat, Musselshell; W. O. Parker, Republican, Billings, and S. K. Deverill, Republican, Park City.

Justices of the Peace: Alex Fraser and F. L. Mann, Billings; W. L. G. Unger, Laurel; Z. B. Brown, Park City; Ged. H. Simpson, Columbus.

## The Adulteration of Food In Montana.

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[F. W. Traphagen, Irvin Cockrill and Edmund Burk.]

About two years ago, with the financial assistance of Commissioner J. H. Calderhead, of the Bureau of Agriculture, Labor and Industry, a number of samples of baking powder, vinegar, sugar and kerosene oil were collected. These were analyzed in the laboratory of the Montana Agricultural Experiment Station, and the results published in the annual report of the Commissioner of Agriculture, Labor and Industry.

This work proved of such interest that it was decided to enlarge the scope of the investigation, and include many of the canned goods, cereal breakfast foods and other articles in daily use on our tables. The purpose of this study is to so impress the citizens of our commonwealth with a knowledge of the existing conditions, that a law, providing adequate protection, may be passed by our next Legislature. It is true that we have laws dealing with the adulteration of food, but no proper provision is made for their enforcement.

The accompanying tables show that unless a rigid inspection is provided for, we are at the mercy of the wholesaler. At the Pure Food Congress, held in Washington in March of this year, the almost unanimous opinion of the delegates was in favor of a proper labeling of all articles of food and drink. Very few were in favor of prohibiting the use of preservatives, of artificial coloring matters, of the mixture of cheaper materials. It was felt that if by means of a label, a purchaser was able to know exactly what he was buying, he would soon come to use the better class of goods.

The congress almost unanimously endorsed the Brosius pure food bill, a copy of which accompanies this report. Of course it is to be understood that this bill only deals with the interstate commerce in such articles, yet its passage would greatly improve the character of the food on sale in our state. The passage of such a bill would leave much to be done still in properly administering a law for our immediate protection. It is to be hoped that our Legislature will petition Congress for the passage of the Brosius bill. This bill has already been favorably reported by the House committee having it in charge, and its counterpart has received equally favorable treatment by the Committee on Manufactures of the Senate.

The passage of such a bill by Congress means more to us in Montana than perhaps to the people of any other state.



First Session.  
Fifty-sixth Congress, { H. R. 9677.

## IN THE HOUSE OF REPRESENTATIVES.

March 16, 1900.

Mr. Brosius introduced the following bill, which was referred to the Committee on Interstate and Foreign Commerce, and ordered to be printed:

### A Bill.

For preventing the adulteration, misbranding and imitation of foods, beverages, candies, drugs and condiments in the District of Columbia and the territories, and for regulating interstate traffic therein, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, that for the purpose of protecting the commerce in food products and drugs between the several states and in the District of Columbia and the territories of the United States and foreign countries, the Secretary of Agriculture shall organize the Chemical Division of the Department of Agriculture into a bureau of chemistry, which shall have the direction of the chemical work of the other executive departments, whose respective heads may apply to the Secretary of Agriculture for such collaboration, and which shall also be charged with the inspection of food and drug products, as hereinafter provided in this act. The Secretary of Agriculture shall make necessary rules and regulations for carrying out the provisions of this act, under which the Director of the Bureau of Chemistry shall procure, from time to time, or cause to be procured, and analyze or cause to be analyzed or examined, chemically, microscopically, or otherwise, samples of foods and drugs offered for sale in the original unbroken packages in the District of Columbia, in any territory, or in any other state other than that in which they shall have been respectively manufactured or produced, or from a foreign country, or intended for export to foreign country. The Secretary of Agriculture is hereby authorized to employ such chemists, inspectors, clerks, laborers and other employes as may be necessary to carry out the provisions of this act, and to make such publication of the results of examinations and analyses as he may deem proper.

Section 2. That the introduction into any state or territory or the District of Columbia from any other state or territory or the District of Columbia, or from any foreign country, or shipment to any foreign country of any article of food or drugs which is adulterated or misbranded within the meaning of this act is hereby prohibited, and any person who shall ship or deliver for shipment from any other state or territory or the District of Columbia, or to a foreign country, or who shall receive in any state or territory or the District of Columbia or foreign country, or who, having received, shall deliver, or offer to deliver, in the original unbroken packages, for pay or otherwise, or offer to deliver to any other person, any such article so adulterated or misbranded within the meaning of this act, or any person who shall sell or offer for sale in the District of Columbia or in any territory of the United States such adulterated, mixed, misbranded, or imitated food or drugs, or export or offer to export the same to any foreign country, shall be guilty of a misdemeanor, and for such offense shall be fined not exceeding two hundred dollars for the first offense, and for each subsequent offense not exceeding three hundred dollars, or to be imprisoned not exceeding one year, or both, in the discretion of the court.

Section 3. That the Director of the Bureau of Chemistry shall make, or cause to be made, under the rules and regulations prescribed by the Secretary of Agriculture, examinations of specimens of foods and drugs offered for sale in the original unbroken packages in the District of Columbia, in any territory, or in any state other than which they shall have been respectively manufactured or produced, or from any foreign country, or intended for shipment to any foreign country, which may be collected from time to time in various parts of the country. If it shall appear from such examination that any of the provisions of this act have been violated the Secretary of Agriculture shall at once certify the facts to the proper United States District Attorney, with a copy of the results of the analysis, duly authenticated by the analyst under oath.

Section 4. That it shall be the duty of every district attorney to whom the Secretary of Agriculture shall report any violation of this act to cause proceedings to be commenced and prosecuted without delay for the fines and penalties in such case provided.

### Definitions.

Section 5. That the term "drug," as used in this act, shall include all medicines

and preparations recognized in the United States Pharmacopoeia for internal or external use. The term "food," as used herein, shall include all articles used for food, drink, confectionery or condiment, by man or domestic animals, whether simple, mixed or compound. The term "misbranded," as used herein, shall apply to all drugs or articles of food, or articles which enter into the composition of food, the package or label of which shall bear any statement which shall be false or misleading in any particular, and to any food or drug product which is falsely branded as to the state, territory or country in which it is manufactured or produced.

#### Adulterations.

Section 6. That for the purpose of this act an article shall be deemed to be adulterated—

In the case of drugs:

First. If, when a drug is sold under a name recognized in the United States Pharmacopoeia, it differs from the standard of strength, quality or purity, as determined by the tests laid down in the United States Pharmacopoeia, official at the time of investigation.

Second. If its strength or purity fall below the professed standard under which it is sold.

Third. If it be an imitation of, or offered for sale under the name of another article.

In the case of confectionery:

If it contain terra alba, barytes, talc, chrome yellow, or other mineral substances, or poisonous colors or flavors, or other ingredients deleterious or detrimental to health.

In the case of food:

First. If any substance or substances has or have been mixed and packed with it so as to reduce or lower or injuriously affect its quality or strength, so that the product, when offered for sale, shall deceive or tend to deceive the purchaser.

Second. If any substance or substances has or have been substituted wholly or in part for the article, so that the product, when sold, shall deceive or tend to deceive the purchaser.

Third. If any valuable constituent of the article has been wholly or in part abstracted, so that the product, when sold, shall deceive or tend to deceive the purchaser.

Fourth. If it be an imitation of, or offered for sale under the specific name of another article.

Fifth. If it be mixed, colored, powdered or stained in a manner whereby damage or inferiority is concealed, so that such product, when sold, shall deceive or tend to deceive the purchaser.

Sixth. If it contain any added poisonous ingredient or any ingredient which may render such article injurious to the health of the person consuming it.

Seventh. If it be labeled or branded so as to deceive or mislead the purchaser, or purport to be a foreign product when not so, or is an imitation, either in package or label, of another substance of a previously established name, or which has been trade-marked or patented.

Eighth. If it consists of the whole or in any part of a diseased, filthy, decomposed or putrid animal or vegetable substance, or any portion of an animal unfit for food, whether manufactured or not, or if it is the product of a diseased animal, or one that has died otherwise than by slaughter:

Provided: That an article of food which does not contain any added poisonous or deleterious ingredient shall not be deemed adulterated in the following cases:

First. In the case of mixtures or compounds which may be now, or from time to time hereafter known as articles of food, under their own distinctive names, and not included in definition fourth of this section.

Second. In the case of articles labeled, branded or tagged so as to plainly indicate that they are mixtures, compounds, combinations, imitations, or blends: Provided, That the name shall be labeled, branded or tagged, as prescribed by the Secretary of Agriculture, so as to show the exact character thereof. And provided further, That nothing in this act shall be construed as requiring or compelling proprietors or manufacturers of proprietary foods which contain no unwholesome added ingredient to disclose their trade formulas, except in so far as the provisions of this act may require to secure freedom from adulteration or imitation: Provided further, That no dealer shall be convicted under the provisions of this act when he is able to prove a written guaranty of purity, in a form approved by the Secretary of Agriculture, as published in his rules and regulations, signed by the manufacturer, or the party or parties from whom he purchased said articles: Provided also, That said guarantor or guarantors reside in the United States. Said guaranty shall contain the full name and address of the party or parties making the sale to the dealer, and the said party or parties shall



be amenable to the prosecution, fines and other penalties which would attach in due course to the dealer under the provisions of this act.

Section 7. That it shall be the duty of the Secretary of Agriculture to fix standards of food products when advisable, and to determine the wholesomeness or unwholesomeness of preservatives and other substances which are or may be added to foods, and to aid him in reaching just decision in such matters he is authorized to call upon the Director of the Bureau of Chemistry and the chairman of the committee on food standards of the Association of Official Agricultural Chemists, and such physicians, not less than five, as the President of the United States shall elect, three of whom shall be from the Medical Department of the Army, the Navy and the Marine Hospital Service, and not less than five experts, to be selected by the Secretary of Agriculture, by reason of their attainments in physiological chemistry, hygiene, commerce and manufacture, to consider jointly the standards of all food products (within the meaning of this act), and to study the effect of preservatives and other substances added to food products on the health of the consumer; and when so determined and approved by the Secretary of Agriculture such standards shall guide the chemists of the Department of Agriculture in the performance of the duties imposed upon them by this act, and shall remain the standard before all United States Courts. It shall be the duty of the Secretary of Agriculture, either directly or through the Director of the Bureau of Chemistry and the chairman of the committee on food standards of the Association of Official Agricultural Chemists and the medical officers and experts before mentioned, to confer with and consult, when so requested, the duly accredited representatives of all industries producing articles for which standards shall be established under the provisions of this act.

Section 8. That every person who manufactures or produces for shipment and delivers for transportation within the District of Columbia or any territories, or who manufactures or produces for shipment or delivers for transportation from any state, territory, or District of Columbia, or to any foreign country, any drug or article of food, and every person who exposes for sale or delivers to a purchaser in the District of Columbia or in any territory any drug or any article of food manufactured or produced within said District of Columbia or said territory, or who exposes for sale or delivers for shipment any drug or article of food received from a state, territory, or said District of Columbia other than the state, territory or the District of Columbia in which he exposes for sale or delivers such drug or article of food, or from any foreign country, shall furnish within business hours, and upon tender and full payment of selling price, a sample of such drug or articles of food to any person duly authorized by the Secretary of Agriculture to receive the same, and who shall apply to such manufacturer, producer, or vender, or person delivering to a purchaser such drug or article of food for such sample for such use, in sufficient quantity for the analysis of any such article or articles in his possession. In the presence of such dealer and an agent of the Department of Agriculture, if so desired by either party, said sample shall be divided into three parts, and each part shall be sealed by the seal of the Department of Agriculture. One part shall be left with the dealer, one delivered to the Director of the Bureau of Chemistry of the Department of Agriculture, and one deposited with the United States District Attorney for the district in which the sample is taken. Said manufacturer, producer or dealer, may have the sample left with him analyzed at his own expense, and if the results of said analysis differ from those of the Department of Agriculture, the sample in the hands of the District Attorney may be analyzed by a third chemist, who shall be appointed by the President of the Association of Official Agricultural Chemists of the United States, and the analysis shall be conducted, if so desired, in the presence of a chemist of the Department of Agriculture and a chemist representing the dealer, and the whole data obtained shall be laid before the Court.

Section 9. That any manufacturer, producer or dealer who refuses to comply, upon demand, with the requirements of Section 8 of this act shall be guilty of a misdemeanor; and upon conviction shall be fined not exceeding one hundred dollars, or imprisoned not exceeding one hundred days, or both. And any person found guilty of manufacturing, or offering for sale, or selling an adulterated, impure, or misbranded article of food or drug in violation of the provisions of this act shall be adjudged to pay, in addition to the penalties hereinbefore provided for, all the necessary costs and expenses incurred in inspecting and analyzing such adulterated articles which said person may have been found guilty of manufacturing, selling, or offering for sale.

Section 10. That this act shall not be construed to interfere with commerce wholly internal in any state, nor with the exercise of their police powers by the several states.

Section 11. That any article of food or drug that is adulterated or misbranded, within the meaning of this act, and is transported from one state to another for sale, or if it be sold or offered for sale in the District of Columbia and the territories of the

United States, or if it be imported from a foreign country for sale, or if intended for export to a foreign country, shall be liable to be proceeded against in any District Court of the United States, within the district where the same is found and seized for confiscation, by a process of libel for condemnation. And if such article is condemned as being adulterated the same shall be disposed of as the said Court may direct, and if the proceeds thereof, if sold, less the legal costs and charges, shall be paid into the Treasury of the United States; but such goods shall not be sold in any state contrary to the laws of that state. The proceedings in such libel cases shall conform, as near as may be, to proceedings in admiralty, except that either party may demand trial by jury of any issue of fact joined in such case; and all such proceedings shall be at the suit of and in the name of the United States.

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**COPY OF ALL MONTANA LEGISLATION BEARING UPON THE ADULTERATION OF FOOD, AND KINDRED SUBJECTS.**

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**Senate Bill No. 42.**

An act to amend Section 702 of the Title X of the Penal Code of the State of Montana, relating to the adulteration of candy.

Be it enacted by the Legislative Assembly of the State of Montana:

Section 1. That Section 702 of Title X of the Penal Code of the State of Montana, of an act concerning crimes against the public health and safety, approved March, 15, 1895, be, and the same is hereby amended to read as follows:

Section 702. Every person who shall, by himself, his servant or agent, or as the servant or agent of any other person or corporation, manufacture for sale, or knowingly sell or offer to sell any candy adulterated by the mixture of terra alba, barytes, talc or any mineral substance, by poisonous colors or flavors or any other ingredients deleterious or detrimental to health, is guilty of a misdemeanor.

Section 2. This act shall be in force and effect from and after its passage and approval by the Governor.

Section 3. All acts and parts of acts in conflict herewith are hereby repealed.

Approved February 22, 1899.

**KEROSENE AND COAL OIL.**

**Chapter XXI., Title VII., Part III., of the Political Code.**

Section 3380. No person must sell, offer for sale, or have in his possession for sale within this state, any kerosene or coal oil, or any of the products thereof, which, from being adulterated, or from any cause will, at the temperature of one hundred and ten degrees, Fahrenheit's thermometer, emit an explosive vapor or gas, or is deficient in quality for illuminating purposes.

The state sealer of weights and measures, or any county sealer, may order a test to be made of any such oil in the possession of any person dealing therein, or offering the same for sale, and the expense thereof must be paid by the person offering it for sale.

Section 3381. The quantity used for such test must be not less than one-half pint. The provisions of this chapter do not prevent the use of gas or vapor of oils for illuminating purposes, when the oils from which such gas or vapor is generated, is contained in reservoirs outside of the building illuminated by such gas.

Section 3382. Every person who violates the provisions of this chapter is punishable as provided in Section 719 of the Penal Code.

**Penal Codes, Title X., Section 719.**

Every person who violates any of the provisions of Chapter XXI., Title VII., Part III., of the Criminal Code, relating to the sale of kerosene and coal oil, is guilty of a misdemeanor.

Section 682. Every person who adulterates any article of food, drink, drug, medicine, spirituous or malt liquor, or wine, or any article used in compounding them, with a fraudulent intent, to offer the same or cause or permit it to be offered for sale as unadulterated or undiluted, and every person who fraudulently sells, or offers for sale, the same as unadulterated or undiluted, is guilty of a misdemeanor.

Section 683. Every person who sells, or exposes for sale, or otherwise disposes of any article of food, drug, drink, or medicine, knowing that the same has become tainted, decayed, spoiled or otherwise unwholesome, or unfit to be eaten or drunk, with intent to permit same to be eaten or drunk, is guilty of a misdemeanor.

Section 684. Every person who manufactures for sale, or offers or exposes for sale, or has in his possession, with intent to sell any article or substance in resemblance of butter or cheese, not a legitimate product of the dairy, and not made exclu-



sively from milk or cream, or into which the oil or fat of animals, not produced from milk, has been introduced to take the place of cream, must distinctly stamp, brand or mark in some conspicuous place upon every firkin, tub, or package of any such article or substance in plain letters not less than one-fourth inch square, the word "Oleomargarine," or the words "Imitation Cheese," as the case may be; and in retail sale of such article or substance, in parcels or otherwise, the seller must deliver to the purchaser therewith, a printed label, bearing the plainly printed word or words, "Oleomargarine" or "Imitation Cheese," plainly marked as aforesaid.

Section 685. Every person dealing in articles or substances described in the next preceding section, and every hotel, restaurant, or boarding-house keeper using such article or substance in his business, must continuously and conspicuously keep posted up in not less than three exposed positions, in and about his place of business, a printed notice in the following words: "'Oleomargarine' or 'Imitation Cheese' sold (or used) here," which notice must be plainly printed with letters not less than two inches square each, and must, upon furnishing the article or substance to his customers or guests, if inquiry is made, distinctly inform each of them that the article furnished is not butter or cheese, the genuine product of the dairy, but is oleomargarine or imitation cheese.

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## FLOUR AND CEREAL BREAKFAST FOODS.

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Our market is filled with cereal breakfast foods of all sorts, for which the most extravagant claims are made. They are put up in fancy packages, and are extensively advertised, all of which, of course, is paid for by the consumer. So far as the chemical composition of the food is concerned they offer little, if any, more than is found in our own locally produced cereal foods. Indeed, it will be found that Montana cereals can be made to produce foods superior to any produced by outside manufacturers. The consumption of these foods in our state is immense, and the market should be held for the benefit of our farmers and millers.

At the same time the consumer would be equally benefited, for instead of having his breakfast food consisting largely of starch, he would get a large proportion of glutinous matter, which is the most valuable food constituent of grain, for of this constituent Montana grain contains an amount which places it in the van.

In this connection it might be well to discuss briefly the points which determine the nutritive value of food. Food taken into the body may perform one or more of three very important functions: First, it may be used to keep the temperature of the body up to its normal point, which is thirty degrees or more above the surrounding atmosphere. Second, it may be used to supply the energy of the working body, just as coal supplies the energy through steam to the locomotive. Third, the most important function of the food is the building of muscular tissue and repairing of waste. For this last purpose the most expensive materials must be used, types of which are the lean of meat, the gluten of grain and the albuminoids of beans. On this account the value of flours and breakfast foods depends largely upon the amount of this albuminoid or proteid material present.

In addition the bread making value of flour is closely related to the percentage of gluten contained, for this gluten holds the starch grains together, and also prevents the escape of the gas produced by yeast or baking powder, thus producing a light spongy bread. The reason that good bread cannot be made from low-grade flour is chiefly because of the absence of this tenacious and at the same time highly nutritious gluten.

While the value of flours is so closely related to the content of the gluten, the percentage of the other constituents, however, does, falling in percentage as the gluten rises, and vica versa, rising as the gluten falls. So without erence to the mechanical preparation of the flour, the value depends very closely upon the percentage of gluten contained.

A further point of superiority that may be confidently looked for in Montana cereal products is the absolute freedom from adulteration. For, if for no other reason, it will not pay our millers to adulterate their product. A very common adulterant of flour in the east is corn meal, which can be supplied very much more cheaply than pure wheat flour, and which is mixed in varying proportions with wheat flour and sold as flour. This is simply a fraud on the pocketbook, and has been prevented to a great degree, but a very different fraud consists in mixing "mineraline" with flour. In connection with these two forms of adulteration let me quote from Dr. R. C. Kedzie of the Michigan Agricultural College.

#### **The Fraud of Selling Mixed for Pure Flour.**

"Not only is such mixed flour inferior in quality, but it sold as pure wheat flour. No mark on barrel or bag gives any intimation that a foreign and inferior article has been added. Instead of honest marking and branding, some high-sounding and catching name is affixed to commend it to the public. Some of the southern millers are singularly most modest about revealing the mixed composition of their super-excellent flour. One miller, in writing about his blended flour, stating privately the amount of adulterant used, closed by saying: 'We, of course, should prefer that our name should not appear publicly in connection with this matter, for reasons which are perfectly obvious to you.' Perfectly obvious!

#### **The Tawney Bill.**

"The millers have been seeking legislation by Congress to compel publicity in manufacturing and vending such adulterated products, and at last victory has perched upon their banner, the Tawney bill having become part of the revenue bill for carrying on the war with Spain. Honest millers are honestly happy over this victory. The manipulator must unmask his battery by taking out a license, paying \$12 yearly for the same, must distinctly brand every package of flour, and place a stamp of 4 cents per barrel on such mixed goods. The license and the stamps will bear a very small part of the expense of a great war, but the Tawney act 'puts the mark of Cain' upon the sly cheat and will go far towards securing honorable dealing in the flour trade. It removes the grounds for hostile orders in council in European governments for exclusion of adulterated goods. It will save the honest miller the money value of all the war taxes he will have to pay. This war hits more rascals than those in Spain and her colonies.

#### **Mineraline.**

"Solomon says that 'God made man upright, but he has sought out many inventions.' To show how far man may depart from uprightness, I need only mention the 'invention' of 'mineraline.' What is mineraline? Listen to their circular, bearing the date of May 7, 1898, from Greensboro, N. C.:

"Gentlemen: We invite your attention to our mineraline, which is without

a doubt the greatest existing discovery. There is no flour mill man who can afford not to use it for several reasons. Your flour will be much whiter and nicer; it does not injure the flour in any way; is not at all injurious to health, and by using mineraline you realize a margin of from \$400 to \$1,600 on each carload you use. To secure a low freight rate we mark it as 'ship stuff.' We can furnish you mineraline f. o. b., care your station, for high-grade flour at \$20 per ton; for medium grade flour, at \$16 per ton, and for bread meal at \$12 per ton, and for feed meal at \$8 per ton. For high-grade flour use 15 per cent. mineraline, and for feed meal use 18 per cent. mineraline. We furnish all our customers with a mixer free of charge. This machine will distribute completely any proportion desired, and costs nothing to attach. All you have to do is to bore a hole in your elevator pipe, clamp on the machine, attach a cord to run it, fill up the hopper, and set the feed to the proportion desired. Enclosed find samples of mineraline for medium grade flour. You cannot afford to let your competitor beat you in both quality and margin. We would be glad to hear from you.

"Very truly yours,

THE YORK MANUFACTURING CO.

"What is mineraline? Nothing but ground rock. Not a particle of food material or any substance than any animal can digest. It is mainly the common rock known as feldspar, a hard stone, which by weathering and decomposition forms clay. It is almost insoluble in the strongest acids, and is as far as possible removed from the realm of life. The addition of it to flour is simply a material of no value whatever in the flour, and which may greatly impair digestion and derange vital functions of animal nutrition. It is an unmitigated cheat, and the miller who mixes it with his flour has struck the bed-rock of rascality. At first sight it would seem that no person who knew enough to grind wheat flour would ever be so foolish as to mix dirt with flour. Yet there is always somebody who is ready to catch at a cheat that promises cash. I have just received a letter from an intelligent gentleman in Greensboro, N. C., the head center of this fraud. Here is his letter:

Greensboro, N. C., June 13, 1898.

My Dear Dr. Kenzie: I have always admired your stand for pure flour. Enclosed please find a kind of rock mined around Greensboro. One man here is now engaged in grinding and bolting this stuff. He has one order for 150 tons of it by a firm in Tennessee. He also sends carlots of it to some north-eastern cities for some purpose. I am told that the Eastern Tennessee man's order is for mixture with wheat flour. Yours truly,

" 'Eternal vigilance is the price of liberty,' and the price of pure food is the same.

"The time at our disposal has not yet permitted of an investigation of the possible adulteration of the various brands of flour on sale within the state, but there is no good reason to believe that any of the cereals are adulterated. While this is true, it is equally true also that most extravagant claims are made concerning the digestibility, readiness for cooking and food value of many of these prepared foods.

"Some brands sold as anti-diabetic foods contain as much starch as ordinary unprepared goods, and are much more harmful, because in fancied se-



curity an invalid will see no reason for caution in the use of an article such as this is advertised to be. The following quotation from the fifteenth annual report of the Maine Agricultural Experiment Station bears upon this point:

“‘Cream of wheat claims to be composed almost entirely of pure gluten, is one of the healthiest and most nutritious foods known.’ It claims to be ‘made from the very choicest of selected hard spring wheat, and being almost pure gluten, is highly recommended for the use of diabetic persons.’ The claim that Cream of Wheat is ‘almost pure gluten is false and should be criminal. Diabetic persons should avoid starch and sugar. As a food for people in health, Cream of Wheat is all right. This preparation contains 75 per cent. of these carbohydrates.’

“Many breakfast foods are advertised as being so prepared that only a few minutes cooking, from two minutes upward, depending upon the brand, is necessary. In no case was it found possible to prepare the food in the extremely short times mentioned. Of course, in the mechanical conditions in which these foods are placed upon the market some diminution of the time necessary for cooking is possible, but not nearly so much as the advertisements would lead the purchaser to believe.

“Another point which illustrates the remark made earlier in this report that the consumer pays dearly for the fine packages in which he obtains his breakfast foods is fully substantiated by an experience in Maine.

“‘The American Cereal Company put their goods up under at least three names and in four forms. Quaker Oats are sold in package, Buckeye Oats in package and in barrel, and the American Cereal Company’s Oats in bulk. The only apparent difference in the four kinds is the price. The Buckeye Oats in bulk retailed at Bangor at  $3\frac{1}{8}$  cents per pound, the American Cereal Company’s Rolled Oats in bulk at 4 cents. The Buckeye Oats cost in Bangor 5.3 cents, and the Quaker Oats, 6.9 cents a pound. They are all good quality rolled oats, and there seems to be no reason why one should pay 6.9 cents a pound, when apparently just as good goods, made by the same company, sell for less than half that price. All of the rolled oats are good goods, from a chemical standpoint, and there are no greater differences in composition than one would expect. The different companies differ no more than different samples from the same companies would.’

“If our millers would place on the market a good quality of rolled oats made from Montana oats, the sales ought to be very large, for there is no reason why with such raw materials as they have to use, they should not manufacture a product hard to excel. The Maine report quoted before contains such an elegant expose of the ridiculous claims of the manufacturers of the so-called ‘Grape Nuts’ that it seemed best to reproduce it here.

“‘Grape Nuts, made by the Postum Cereal Company, is made by special treatment of entire wheat and barley.’ These goods have nearly the same approximate composition as the wheat foods. Part of the starch has been changed into dextrine and grape sugar. The claims of the makers are preposterous. Grape Nuts ‘are a condensed food.’ ‘Four heaping teaspoons of Grape Nuts are sufficient for the average meal.’ ‘The system will also absorb a greater amount of nourishment from one pound of Grape Nuts than from ten pounds of meat, wheat, oats or bread.’ A man at moderate work needs



per day about .28 pounds of protein and sufficient fats and carbohydrates in addition to make the potential energy of the day's food 3,500 calories. Four heaping teaspoonfuls of Grape Nuts weigh about one ounce. The protein and energy needed for one meal (1-3 of one day) and that furnished by four heaping teaspoonfuls of Grape Nuts are compared in the following table:

	Protein Pounds.	Fuel Value. Calories.
Needed for 1-3 day by man at moderate work.....	.090	1,175
Furnished by four heaping teaspoonfuls (1 oz.) of Grape Nuts.....	.007	117

It would require .77 pounds of Grape Nuts ( $\frac{3}{4}$  of a package) to furnish 1-3 of the protein needed for one meal for a man at moderate work; the energy needed would be afforded by .63 pounds.

The nutrients of beef are more completely digested and absorbed than those of vegetable foods. There is no reason for thinking that Grape Nuts would be more completely digested than rolled oats, wheat flour or bread. About 85 per cent. of the protein and of fuel value of vegetable foods are digested and rendered available to the body. In the following table there are compared the pounds of protein and fuel values of one pound of Grape Nuts with 'ten pounds of meat, wheat, oats or bread.'

Pounds of protein and fuel value of one pound of Grape Nuts compared with ten pounds of beef, rolled wheat, wheat flour, rolled oats and bread.

	Protein Pounds.	Fuel Value Calories.
1 pound of Grape Nuts .....	.12	1,870
10 pounds round steak, including bone.....	1.90	8,950
10 pounds beef rump, including bone .....	1.29	14,050
10 pounds rolled wheat .....	1.01	17,650
10 pounds bread flour .....	1.31	16,450
10 pounds rolled oats .....	1.50	19,650
10 pounds white bread .....	.80	12,200

While there is no question that Grape Nuts is a good cereal food, it is difficult to understand why the manufacturers should make claims so absurd and contrary to fact."

### Jams, Jellies and Preserves.

Probably no class of food materials is more generally adulterated than the jams, jellies and preserves. It is possible to get samples purporting to be one of these preserved fruit products which contains no fruit whatever. We have found samples in this state which contained glucose, starch paste, salicylic acid, a coal tar dye and some seeds which were likely the seeds of grass rather than of fruit. This comprised the contents of one of the jars of jam which we examined. In another series of jams there was a small amount of fruit in such condition as would allow of its easy recognition, but the great mass of the jam was made up of glucose syrup and starch paste, with a considerable amount of salicylic acid added to prevent fermentation.

See table of analysis on following pages:

### Canned Soups.

In general, very little adulteration was found to be present in the canned soups examined. However, this is true of all the samples, that a dilution to the extent indicated on the label made an extremely "thin" soup, and at best the food values so obtained was extremely expensive. As a convenient and

easily prepared food, these soups furnish an article that is all that could be desired, but as a part of an economical dietary they have no place.

See table of analysis on following pages:

#### **Tomato Catsups.**

It is doubtful if any article of diet so generally contains preservatives as do tomato catsups. The addition of preservatives to this class of foods becomes necessary because the article is not entirely used up as soon as opened, but may be placed day after day upon the table, and a little used at a time. The preservatives used most commonly are salicylic acid and benzoic acid, but others are occasionally used.

See table of analysis on following pages:

#### **Cream of Tartar.**

To make use of a form of expression commonly known as the Irish bull, many of the cream of tartars on sale in our state are something else; that is, they contain no cream of tartar whatever. This is a condition that would be remedied by the operation of such a law as is comprised in the Brosius bill.

In many instances our merchants know what they are purchasing, and yet they sell these inferior goods under false names, and for better materials; the price, however, is not lower. These so-called cream of tartars are what are known in the trade as "C. T. S." That is, cream of tartar substitute, an article made up of burnt alumn, or acid calcium phosphate, or some other cheap acid constituent to take the place of the higher priced cream of tartar. Usually starch, gypsum or some other worthless filler is added in addition.

One of the retailers told me he knew the sample I had just secured of him was not cream of tartar, yet he did not hesitate to sell it under a false name. In many respects some of our retailers are not more honest than the wholesaler who supplies their goods.

See table of analysis on following pages:

#### **Baking Powder.**

Two years ago when these investigations were undertaken for the first time, a very considerable number of low-grade baking powders were on the market. This year we have found a decided improvement, for not only have many of the lower grades disappeared from the state, but in addition there has been a decided improvement in the better grades.

The value of baking powder is primarily determined by the amount of gas eliminated by it under the conditions associated with the kneading of bread. There is another condition, however, which is very important, and that is as to how the residues from the baking powders exist in the bread, and what the effect of such compounds is upon the human system. In making bread with yeast the principal products of the action of the yeast plant are the gas and the alcohol, the latter of which is entirely dissipated during the baking.

Cream of tartar baking powders leave in the bread the double tartrate of sodium and potassium, which is commonly known as Rochelle salt, so frequently used as a laxative. The phosphate powders are changed during the bread-making process into phosphates of calcium and sodium, neither of which may be considered harmful, and which may even have an important function in bone and tissue formation.

Of another type of baking powders, and of still another to a less degree, one cannot be quite so confident of the harmlessness of the residual materials. These are the alum and the alum phosphate powders. It is true that only small amounts of alum may be in a form capable of being dissolved by the digestive fluids, yet, on the other hand, we know of the harmful effects of large quantities of soluble aluminum salts. These salts have the power of

interfering with the process of digestion, and while there is no certain knowledge that the small amounts present in bread and biscuit made with alum baking powders will produce harm, yet the preponderance of opinion of experts is unfavorable to their use.

See table of analysis on following pages:

### **Vinegar.**

It is a fact that most of our citizens pay little attention to the nature of the vinegar they use. Vinegar is usually purchased not only as a material for rendering other foods sour, but quite as much for the fine flavor possessed by the better grades. In this country preference is generally given to the vinegar made from apple cider, and it is supposed that such vinegar is what we usually get in the stores. So highly esteemed is the cider vinegar that it commands a distinctly higher price, and vinegars from other sources are made to imitate it as nearly as possible.

But on inquiry in this state it developed, to our great surprise, that to the ordinary consumer vinegar was vinegar, no matter what its source, and that there was very rarely a call for cider vinegar as such. As a matter of fact, there is little pure cider vinegar on sale in this state, but much imitation cider vinegar is sold in its stead. So far as the strength of the vinegars is concerned, there is little to complain of, the standard of from 4 to 5 per cent. acid required in other states being usually found.

The practice of one firm of manufacturers is most reprehensible, and calls for severe condemnation. Sample jugs of apple cider of excellent quality are sent out by Wallace and Gregory Bros., of Paducah, Kentucky, and a totally different vinegar is sent in the larger packages, even though the same quality was promised the retailer. This was the experience of at least one of our retail grocers, the Gary Bros., of Bozeman.

See table of analysis on following pages:

### **The Use of Preservatives.**

The question of the continued use of the small quantities of antiseptics which are present in so many foods is a very important one. There is no doubt that these antiseptics prevent, to a greater or less degree, the digestion of foods, and anything that hinders digestion is hardly desirable in food. It is entirely likely that a strong person may use repeatedly food containing such adulterants, but if so it is because his powers of digestion are sufficiently great to overcome their inhibitory effect. With persons of weak digestive power foods so preserved can hardly prove other than harmful. On the whole, it seems only fair that we should know exactly what we are eating, and that we should be in a position to avoid that which is harmful. In this connection the following testimony given before the Senate Committee on Manufactures is pertinent to the discussion:

Committee on Manufactures, United States Senate,  
Imperial Hotel, New York City,  
Thursday, November 16, 1899.

#### **TESTIMONY OF PROF. RUSSELL H. CHITTENDEN.**

Russell H. Chittenden, sworn and examined:

The Chairman. What is your profession, and where is your residence?

Prof. Chittenden. I am professor of physiological chemistry in Yale University, and Director of the Sheffield Scientific School, New Haven, Conn.

The Chairman. Will you kindly state briefly what course of study you have pursued, and what degrees you have taken, with the purpose of taking on record your preparation for the profession which you follow, and also state what experience you have had?

Prof. Chittenden. I was graduated from the Sheffield Scientific School of Yale in 1875 with the degree of Bachelor of Philosophy. I studied physiology and physiological chemistry and allied branches in Heidelberg University in 1878 and 1879. I took the degree of Doctor of Philosophy at Yale in 1880, and have been professor of physi-



ological chemistry at Yale ever since 1882. I am also a member of the National Academy of Sciences and president of the American Physiological Society.

The Chairman. Have you, in the course of your study and experience, had occasion to analyze food products in this country?

Prof. Chittenden. Ever since 1882—for the last seventeen years—I have been very much interested in problems connected with the study of digestion and nutrition. In fact, that has been one of my special lines of work, and in that direction I have had occasion to study the action of a large number of substances with reference to their influence on digestion and nutrition, and have had occasion to make various analyses of food products.

The Chairman. And have you given special attention to the study of the use of preservatives or antiseptics?

Prof. Chittenden. That has come incidentally; in fact, I have studied a large number of substances which at the time were not in use as preservatives, but have become prominent since that time as such.

The Chairman. What are the usual preservatives used?

Prof. Chittenden. So far as my knowledge goes, the number is very large, of course, varying according to the character of the food product which is under consideration. Vinegar, acetic acid, common salt, various salines, borax, or sodium borate, boracic acid, salicylic acid, and a great many others which I need not mention, perhaps.

The Chairman. I would like if you would give the committee the benefit of your opinion generally as to the use of antiseptics in food.

Prof. Chittenden. Summed up in a few words, I think that there are occasions and there are products where it is desirable at times to use preservatives, but I have the general feeling that it is exceedingly important that we should have some law or some method of control by which all food products of any kind to which preservatives have been added should have a label or some mark which would specify the nature or character of the substance added, and the quantity of that substance added. In other words, I do not believe that any general law which would exclude the addition of what you speak of as poisonous substances would suffice, because I think it is a very difficult matter to find a body of men who will agree upon what constitutes a poison. I can perhaps illustrate my meaning, if I speak more fully, by giving an illustration: Take, for example, the gastric juice; that is to say, the stomach juices upon which we all depend for the digestion of any food. One of the governing agents there is the hydrochloric acid, which is present in the gastric juice to the extent of two-tenths of one per cent. That is perfectly harmless. It is an indispensable agent of digestion, and yet every chemist knows that hydrochloric acid, or muriatic acid, as the chemist calls it, sometimes is one of the most poisonous substances in the concentrated form.

So, again, with ordinary vinegar or acetic acid, which is a common preservative for articles of food, and has been in use for many years. In that form it is perfectly harmless, but in the concentrated form it is one of the most violent poisons. You cannot conceive of anything more poisonous. So with many other substances which we use frequently as preservative agents, or as additions to our food; they are perfectly harmless in small quantities, but when the quantity is increased become poisonous. In other words, it is a question of quantity. It is no question of the substance whatsoever.

I think you might say that that illustrates the general principle. It is hard to define what poisons are. Some of the most violent poisons are, in fact, in small quantities, very judicious agents.

There is an old saying that every medicine is a poison, and every poison a medicine. It is a question of quantity. In certain definite quantities we cannot well say that all poisonous substances must be excluded, but we can insist upon a law which will compel the stamping on a label of this or that agent, which is added for this or that purpose, and the quantity; then we have something that may be controlled for the great benefit of the people.

The Chairman. Will you please state the difference between a poison and an antiseptic?

Prof. Chittenden. I do not think that one can well make a direct statement which would specify a difference. Many antiseptics are violent poisons, when the quantity is sufficiently large. Hydrochloric acid, to come back to the old illustration, is an example; but of course, if you increase the quantity beyond a certain point its antiseptic action would be manifest, but would also produce death if brought in contact with the living body, internally.

The Chairman. What is the action of antiseptics on food; what are they used for?

Prof. Chittenden. The primary object, as I understand it, is to prevent the growth and development of micro-organisms, which are ordinarily present, but they prevent



their development, and consequently interfere with the production of poisonous products which would tend to contaminate the food.

The Chairman. It would also interfere, would it not, with digestion?

Prof. Chittenden. I do not think that that necessarily follows, but I think that as a rule antiseptics would interfere with such action if the quantity were sufficiently large. That varies with the individual bodies.

The Chairman. Have you ever examined any of the antiseptics sold for preserving milk, for instance? Have you seen any of those antiseptics put up in bottles?

Prof. Chittenden. No; I have never analyzed any of those. In fact, I know nothing of them, except by hearsay.

The Chairman. We have brought before our committee quite a number of antiseptics that are advertised under different names. In Chicago the thing called "formaldehyde" was brought in.

Dr. Wiley. Yes; it was called "Freezum."

Prof. Chittenden. I have heard of those things.

The Chairman. Do you think it wise that those articles should be permitted to be sold generally and indiscriminately among the people? Take formaldehyde, for instance. Do you think that dangerous?

Prof. Chittenden. I do not think that it ought to be used indiscriminately.

The Chairman. What articles of food have you analyzed that have conveyed or shown the presence of antiseptics?

Prof. Chittenden. I have analyzed very few that have shown the presence of antiseptics. Of course, in the course of the period I have mentioned I have had occasion to analyze a great many, but, after all, my special line of work has been rather in the line of studying the physiological effects of a variety of agents, some of which have come into prominence as preservatives.

I have analyzed some products, but most of those which have fallen into my hands have been free from impurities. I have analyzed some of the preserved beef, etc., for the United States government, but with one exception they were all free from any additions. The only one which I can recall which had anything in the line of addition contained simply a large amount of common salt, with just a trace of niter—a very minute trace. It was practically the addition of salt.

The Chairman. Will you please describe the effect that the preservative has on the stomach?

Prof. Chittenden. That depends altogether on the nature of the substance which is meant by the word "preservative." Alcohol, for example, is a good preservative. In some quantities, alcohol, so far as can be measured by experimental evidence, has very little, practically no, injurious effects in small quantities. So far as the digestive processes are concerned, it rather stimulates than retards the digestion, so far as can be measured by experiment. Among common preservatives there is to be found common salt, and in small amount that tends to increase the rate of digestion; but as the quantity of salt is increased you find that there is a falling off in digestive action. The salt tends to retard the solution of the food stuff; but still, if one is to give a thoroughly accurate answer to such a question, one must keep in mind that what we call digestion is the result of a variety of physiological processes. A layman thinks of digestion as one process, but it depends upon the solvent action of a given quantity of the gastric juice, and is modified by the rate of flow.

As you add a certain quantity of alcohol to a given quantity of stomach contents, you find that the quantity of alcohol in that given volume will retard the rate of digestion. It tends to slow the solvent action. But in the living stomach you have an increased rate of flow as the result of the alcohol, and one balances the other to a certain extent. In the living stomach a certain quantity of alcohol present does not interfere with the digestive processes. It has, on the other hand, physiologically speaking, made perhaps a greater drain on the body, because it has called forth an increased secretion of the gastric juice, which means increased labor on the part of the organism to produce that gastric juice.

Then the rate of digestion depends upon the peristalsis. We all know the benefit of taking an after dinner cup of coffee—that it improves our digestion. It does not increase or decrease materially the rate of solvent action, but it increases the peristaltic movements of the intestine, and in that way the rate of digestion is increased. So that there are a great many problems of that kind which really must be considered in attempting to answer any such general question.

Of course, there are agents like alcohol which, taken in large quantities, produce direct effect on the mucous membrane of the stomach by inflammation, etc., but that means more especially in large quantities. So hydrochloric acid of the gastric juice belonging in the stomach does no harm, as two-tenths of one per cent.; but 5 per cent. would have a local inflammation at once. So, as I have said, quantity must always be taken into account in such cases and in such connections.

The Chairman. What is the effect on the stomach of the use of salicylic acid?

Prof. Chittenden. So far as my own observation and experience goes, there is almost invariably a retardation of digestion in the stomach.

The Chairman. It has a tendency to stop or paralyze?

Prof. Chittenden. I should say retard, rather. And it is said that the long continued use of salicylic acid results in local effects, but of that I do not know.

The Chairman. Local effects—how?

Prof. Chittenden. Local effects on the mucous membrane; but I do not by personal experience as to that.

The Chairman. How is it with regard to borax? That is a matter that has been under discussion before the committee.

Prof. Chittenden. I have made a good many experiments with borax and boracic acid under varying conditions, and so far as it can be stated in a general way—I know that my own experiments indicate that small amounts of borax produce no measurable effect that could be spoken of as deleterious; in fact, very small amounts tend to increase, if anything, the rate of digestion. That is specially true of boracic acid, and borax is in itself, I think, a little inclined to retard digestion, so that the boracic acid is not so active as the sodium borate or borax.

I have tried a large number of feeding experiments on dogs, with reference not so much to digestion by itself as with reference to the combined or possible combined action of digestion and the other processes of nutrition; and where the quantities given are small, there are no injurious effects that can be noted at all, but where the quantity given is large enough, if you push it to the limit, you will find that there is produced a nausea and vomiting. That is the maximum effect that I have observed. The urine will frequently become alkaline with large quantities of borax, but not in small quantities.

The Chairman. Boracic acid is a product of borax?

Prof. Chittenden. Yes.

The Chairman. Is it changed in its formation—and how do you make it?

Prof. Chittenden. You simply separate it from borax by simply withdrawing; that is, borax is sodium united with boracic acid, just as common salt is sodium combined with boracic acid, or combined with the radical, the chlorine. You can take borax and separate boracic acid from it.

The Chairman. In the preservation of meats in this country we use which—boracic acid or borax?

Prof. Chittenden. That I do not know by any personal knowledge.

Dr. Wiley. In former years borax itself was almost exclusively used, where used at all. In the last few years boracic acid is largely coming into use instead of borax, especially in preserving hams.

Prof. Chittenden. I may say that our Connecticut State Board, or rather the Agricultural Experiment Station, have made a number of experiments in which borax has been found, and I think boracic acid, but I think borax has been a little more prominent in those food products.

The Chairman. In such quantities as you have observed, did you consider it dangerous to the public health?

Prof. Chittenden. Not where I have seen it. I have heard of very large quantities being found, but in these analyses that have been reported at the Agricultural Experiment Station in New Haven the quantities were always small. The percentages were small.

The Chairman. Do you think that one-half of one per cent. of boracic acid in butter would be objectionable?

Prof. Chittenden. Not in my judgment; no.

The Chairman. I would like to get, for the benefit of the committee, your idea as to a national law to regulate the use of these preservatives or antiseptics.

Prof. Chittenden. My own opinion is that the best result would be obtained by a law which should compel the manufacturers to stamp upon the product the nature of the preservative used, and the quantity of the preservative present, and that then there should be a commission or some one in authority to whom such products could be referred, with power in such matters.

The Chairman. What do you say as to the use of copper and zinc colors to give vegetables a green appearance?

Prof. Chittenden. My judgment there is that their use should be prohibited, because, as I understand it, there is nothing gained except an effect which appeals to the eye purely. There is no question there of preservation, or of correcting the possible injurious effects of micro-organisms, but the custom is the addition of what we know to be a poisonous substance, and the only effect produced, as I understand it, is to deceive the eye. In other words, I see nothing to be gained by the addition of such agents, and there is possible danger.

The Chairman. Then by or through this commission you would not only have marked the preservatives contained, but in some cases you would prohibit the use of a certain class of preservatives?



Prof. Chittenden. So-called preservatives, which are well known to be absolutely poisonous and dangerous, I think it would be wise to prohibit.

The Chairman. You have given this question of digestion long and careful study. Will you kindly name some of the articles which you consider improper to be sold for food that are being sold as food?

Prof. Chittenden. You mean as additions to food?

The Chairman. Yes; either as additions, or as food products themselves.

Prof. Chittenden. I should say that such agents as you referred to some moments ago—sulphate of copper and salts of that kind which are used to color products—ought to be prohibited, for I see no possible occasion for their use as food products, or as additions to food products. And I should question the use of salicylic acid, and although I have very little knowledge of the action of formaldehyde, I am inclined to believe that that product is of rather questionable value in such mixtures. But, as I say, I have no personal knowledge. I have never experimented sufficiently with formaldehyde to warrant me in making a definite statement.

The Chairman. Formaldehyde is a preparation from wood alcohol, is it not?

Prof. Chittenden. Yes. It is sold, of course, under a variety of names. The "Freezum" spoken of a few moments ago, is essentially a formaldehyde product.

The Chairman. I am very much obliged to you, Professor, for giving us your time and attention, and if you have any suggestions which you would be willing to make to the committee, I should be very glad to receive them, as they would undoubtedly be valuable to the committee, regarding any foods that are sold that ought to be marked differently from what they are.

Prof. Chittenden. What seems to me to be the one important point which I think I have perhaps emphasized sufficiently already, is the great importance, as to all food products which contain additions, of having those products so stamped that they will show the nature of the substance added, and the quantity of that substance which is present. That seems to me to be one of the very essential points for the protection of the community at large, and one which ought not to be harmful to the manufacturers of such products.

The Chairman. Upon the question of the establishment of such standards of purity, or standards of safety, or standards of strength foods—do you think that such standards could be established under a commission such as you suggested?

Prof. Chittenden. I think it could; yes. I think such a commission would be of very great value, of very great help, in establishing better conditions in all these respects.

The Chairman. Would you favor fixing a standard for everything that could be reasonably fixed?

Prof. Chittenden. Yes; so far as it can be done.

Prof. E. H. Jenkins, of the Connecticut Experiment Station, testified as follows:

"I should like to say a few words in regard to the use of antiseptics and our position in regard to them. There is a great deal of conflicting evidence with regard to their healthfulness, which, it seems to me, is totally irrelevant to the question at issue.

"It is unquestionable that salicylic acid and borax are used in medicine, and recommended by physicians, and, we must believe, are valuable remedies in their place. So, also, they are used in food in very considerable quantities, and certainly take the place, as far as preserving food is concerned, of salt, and wood smoke, and vinegar, which were the old time accepted antiseptics. I doubt whether they are any more poisonous than salt, wood smoke and vinegar may be to certain persons. As I said before, a poison is a thing you cannot define. A thing is a medicine (that is, it is a good thing) in one dose; it is harmless in another dose; injurious in another dose, and a poison in another and a larger dose. Strychnine is poisonous in certain quantities; so is arsenic. A person can poison or kill himself even with vinegar, if he takes enough of it. But it seems to me that that does not touch the point.

"The point is this, that every man's system is a law unto himself, and the comfort of living depends largely for each individual upon his learning, by his own experience of life, what agrees and what does not agree with him. Two persons apparently in equally sound health are very differently affected by the same food. Sugar is a thing that I cannot take to any extent without being made uncomfortable and even sick by it. Yet I had a man in my employ at one time who was cured of violent attacks of dyspepsia by taking large quantities of sugar.

"There are a good many people who cannot abide pickles; some cannot abide wood smoke; some cannot stand much salt food. The old time preservatives and the modern preservatives are different in this, that in the old time affair every person had information at once by taste and smell what he was taking, and could tell from his experience whether it agreed with him or not. These modern preservatives are used without any notice given by the vendor that they are used. The opportunity and the right of the individual to find out whether they will or will not injure him is taken away from him. That, it seems to me, is the rational ground for requiring notice of the presence of these preservatives. Such notice should be given to the consumer.

"I believe that preservatives may have their place in food—a legitimate place—but certainly they should not be used unless it is distinctly stated on the packages which enclose the food, unless notice be given to the buyer by the seller that the preservatives are used. This information should be given in some way. It should be made known that they are present, and in what quantity they are present. Take the one article of oysters. We may all agree that borax is perfectly harmless; but here is a sample of oysters that contain 38 grains of borax in the pound. Here is an invalid with a delicate digestion, for whom fresh oysters are ordered by the physician. I do not believe that any reputable physician would prescribe that his patient should take 38 grains of any considerable fraction of that material in that way when he knew nothing of it."

The Chairman. That is of borax?

Prof. Jenkins. It might work considerable disturbance in a delicate stomach, and I think that would be the opinion of a physician as to the case of an invalid lady, whereas when she was well she might be able to stand that dose without trouble.

In our own state the use of antiseptics was forbidden in the law, and then a provision was inserted further on which neutralized the effect of the prohibition. It was provided that when any matter or ingredient was added because the same was required for protection or preservation of an article of commerce to put it in a fit state for carriage or consumption, then it might be used. So that if we find borax or formaldehyde, the question now comes up, is it (borax or formaldehyde) necessary to fit the article for carriage or consumption?

The Chairman. Would you recommend a national law in regard to the use of antiseptics?

Prof. Jenkins. I am not enough of a legislator to feel competent to recommend anything in the way of national legislation. It is all a question of how far it is a matter for the general government, as distinguished from state governments, to regulate these things. But if it is deemed advisable that the United States government shall pass a pure food law, it seems to me certainly wise that such a law should forbid the use of antiseptics that are not evident to the taste or smell, unless their presence is called to the attention of the purchaser, either in the label or in the sale of the article.

The Chairman. What do you think of having a national board under the direction of the Department of Agriculture—a national board or commission to be appointed by the President, to fix standards of foods, and to control the use of preservatives generally?

Prof. Jenkins. I think that the fixing of standards for foods, or for certain foods, would certainly be a most desirable thing. As to the special means by which that could be accomplished I have not given the matter sufficient thought, and I do not feel competent to speak. I think it is the right thing to be accomplished, and that such standards for certain foods ought to be fixed.

The Chairman. And you see the advantage, I suppose, of a national law as against state laws, because states might have conflicting laws, rules and regulation on the same subject. A man may be a perfectly honest manufacturer, and may send goods into your states marked in one way to comply with the laws of your state, and may have to mark or label them differently to send them into another state.

Prof. Jenkins. Yes; there is that objection. Manufacturers would have to brand their goods in different ways in order to meet local regulations.

The Chairman. Have you any other suggestion to make to the committee?

Prof. Jenkins. I think I have nothing more, unless you have some questions to ask.

The Chairman. I think I have nothing more to ask you, Professor.

Prof. Willis G. Tucker, of the Albany Medical College and the New York State Board of Health, gave the following testimony:

Willis G. Tucker, sworn and examined:

The Chairman. If agreeable to you, Professor Tucker, I will ask Dr. Wiley to propound the questions to you, as I am not feeling at all well this morning.

Prof. Tucker. It is quite agreeable to me.

Dr. Wiley. Please state your profession, Professor Tucker.

Prof. Tucker. I am professor of chemistry in the Albany Medical College and director of the State Board of Health of New York state.

Dr. Wiley. Have you long been engaged in the examination of food products?

Prof. Tucker. I have been more or less engaged in that work for a period extending over some twenty years.

Dr. Wiley. Have you studied the subject of adulteration of human food?

Prof. Tucker. I have.

Dr. Wiley. In the examination of drugs have you ever had occasion to examine those which are sometimes used as food preservatives—such as formaldehyde, salicylic acid, benzoic acid, etc.?

Prof. Tucker. Not specially; no, sir.

Dr. Wiley. In your former examination of food products was your attention directed to the use of preservatives in foods?



Prof. Tucker. At the time we were most actively engaged in that work the use of food preservatives was not nearly so common as now, so that we have done not very much work in that particular direction.

Dr. Wiley. Can you state what is the attitude of the New York State Board of Health toward the subject of preservatives in food?

Prof. Tucker. I do not think that they have ever declared their attitude precisely. The matter has come up in various ways in our legislature during the last few years, and our general law covers the whole case really, because it prescribes the use of deleterious constituents, and a food preservative, if found to be deleterious, would not need to be specifically named in the law or in the regulations of the board. It would come under the general law. We have law enough perhaps in New York state. The difficulty is in enforcing it without sufficient appropriations to carry on constant inspection, and prosecuting cases, or to secure the co-operation of the district attorneys of different counties. Without that no great results can be reached.

Dr. Wiley. Has the State Board of Health or any other authority established standards of purity for foods?

Prof. Tucker. They have the right to do so, but they have established no such standard except in the case of mustard, I believe, some years ago, and two or three other articles.

Dr. Wiley. As to vinegar, do you know whether they have established a standard for that?

Prof. Tucker. We have a special law that does that.

Dr. Wiley. What is pure vinegar under the law of the state of New York?

Prof. Tucker. It is outside of my department, as I stated, but my impression is that it is  $4\frac{1}{2}$  per cent. absolute acetic acid, and  $2\frac{1}{2}$  per cent. of cider vinegar.

Dr. Wiley. Is it your information that only a cider vinegar is regarded as a pure vinegar in this state, or is malt vinegar regarded as pure also?

Prof. Tucker. Yes; malt vinegar, if not sophisticated.

Dr. Wiley. What is your opinion, as one of the health officers, as to the effect of food preservatives on the general health?

Prof. Tucker. That is a pretty broad question. Salt is a preservative; sugar is a preservative; alcohol is a preservative. We have had and used preservatives from time immemorial. The housewife puts up brandy peaches and other such things; we have corned our meats, and have used organic and inorganic substances in the preservation of food products from time immemorial. So that I do not think we could start by saying that the general use of preservatives is injurious. In many cases there is certainly room for difference of opinion as to the effects of the quantities of such things as borax, boric acid, salicylic acid, formaldehyde and such things, in the quantities ordinarily used in foods for the human system. That difference of opinion exists among experts; it is a "disagreement of the doctors," so to speak, and has been heard many times in our legislative hearings and before committees.

Dr. Wiley. I call your attention to the subject because your opinion will be valuable to the committee, as an expert, as to what legal steps should be taken to control the use of preservatives in foods by the Federal government, not the state government, but for the controlling of interstate commerce, inasmuch as that is as far as the Federal law can apply. For instance, Professor Tucker, you have a law in the state of New York which prevents food adulteration. If a person is convicted he may be a perfectly innocent person, because the food which he sells may have been made in Pennsylvania, and New York is powerless to strike the guilty party. The object of the Federal law would be to strike that guilty party. What would be your idea of a Federal law controlling the use of say suspicious preservatives—not sugar, nor salt, but such things as you have mentioned yourself as being doubtful—such as salicylic acid and formaldehyde.

Prof. Tucker. My opinion being that salicylic acid is the most objectionable of the preservatives now said to be commonly used, it would be desirable, I think, if food articles to which it has been added had the fact stated on the label or package in which the goods are contained. I should not feel like giving it as my opinion that salicylic acid is necessarily harmful to all persons in such small quantities as may be sufficient to preserve certain food articles; but I think there is some evidence tending to that view, and that the public should not be fed with staple articles of food in which a medicinal agent so active as salicylic acid is introduced, perhaps in excessive quantities, and by ignorant compounders, without knowing the fact.

Dr. Wiley. Do you not know that in point of fact the health officers of most countries have interdicted the use of salicylic acid in food products?

Prof. Tucker. I believe that it has been interdicted in several foreign countries—for goods of home consumption at least.

Dr. Wiley. What is your opinion, Professor Tucker, regarding the establishment of a national commission of competent experts to determine questions of this kind?

Prof. Tucker. I should entirely favor it. I think that is the right direction in which we should move. I think much time is lost and money uselessly spent by the

different states in going over and over the same ground, and in a different way. There is much talk in the air about adulteration—so many people believe that the ordinary articles of food are so much adulterated or sophisticated, that they need to be answered and informed. For my own part, I believe there is much less adulteration than is popularly supposed. The case of starch and sugar is a case in point. The common idea that confectionery sugar is starch or marble dust. Probably you could collect thousands of samples without finding other than pure samples. It is a case like that of calves' brains, and milk, and a thousand other fictions.

Coffee is sold as a mixture. Of course, there are many common varieties, but I do not believe that they consist of the deleterious materials and rubbish which we find published in some of our daily papers, such as was published in our city last summer—a case or two being spread out into a great lot of figures. The public is misled and misinformed. Our state, in attempting to do the work for itself, goes all over what another state has done. One reason that I do not always favor investigations of this class is because of the work that such men as you (Dr. Wiley) have done, so much standard classical work, and for New York state to re-collect the same articles, and to go all over the work again would be to waste money. But the idea of a national commission, who should have competent means to investigate and tell the people what articles are and what are not harmful, appointed to recommend national legislation bearing on these questions—that is the right method of going to work at the remedy, I think.

Dr. Wiley. Aside, now, from substances that may be considered injurious to health, what is your idea of other adulterations which are not particularly injurious, but simply fraudulent.

Prof. Tucker. I do not know that they need any other special protection than the state gives to other articles of consumption. The man who buys the cheapest goods he can find in the market has no right to expect that he will get the first quality. And, if we pay the price for cotton goods, we cannot expect to get all linen. If we pay the price of shoddy, we cannot expect to get pure wool. If we buy the cheapest ground coffee and the cheapest syrups and flavoring extracts and the like that we can find in the market, and the lowest grades of pease and such things, I do not think that the consumer has the right to expect that the state will assure him that he is getting articles of the purest quality.

I think that perhaps we have had a little more legislation than we need—legislation which in some cases has been oppressive, and has affected certain industries harmfully, and which the public has not needed or deserved.

Dr. Wiley. In other words, it is your opinion that a food product which is in itself wholesome should not be forbidden to the market?

Prof. Tucker. Certainly; that is my opinion.

Dr. Wiley. Hence, you would say that a law forbidding the sale of oleomargarine, as such, would be unjust?

Prof. Tucker. Entirely so; fit for the dominions of the Czar of Russia; not for the United States.

Dr. Wiley. But a law which would forbid oleomargarine to be sold as anything but oleomargarine would be right, in your opinion?

Prof. Tucker. Yes.

Dr. Wiley. And it should not be permitted to be sold as, for instance, honey?

Prof. Tucker. No. A man who goes into a department store and buys a pint of olive oil for 20 cents, has no right to expect that he is getting the real Italian oil. I do not know, as a matter of abstract form, that the state is called upon to protect him from the sale of cotton-seed oil, or peanut oil, or some other oil, in place of the real olive oil, any more than it would be called upon to guarantee to him that when he buys a linen handkerchief it should be all linen.

Dr. Wiley. What is to prevent that department store to which you refer from selling that oil for 80 cents, instead of 20 cents, and charging for the inferior article the price of the genuine article?

Prof. Tucker. I think business would settle that. A man willing to pay 80 cents, or the full price, would be capable of telling whether he got the right article.

Dr. Wiley. But is every ordinary consumer capable of judging the genuine article and distinguishing it from the other?

Prof. Tucker. I think that 90 per cent. of them would know the difference.

Dr. Wiley. Well, I do not think that 10 per cent. could. I doubt if 5 per cent. could.

Prof. Tucker. Undoubtedly the cardinal principle is that goods should be sold under their correct names. I do not think that an inferior or cheaper oil should be sold for olive oil, but I do not know how important a matter that is in comparison with a great many other matters of far greater importance; that would be for a commission to determine. I should not deem that a matter of great importance.

Dr. Wiley. I will say that I constantly use cotton oil on my salads at my own house because I am too poor to buy the genuine olive oil, but I get my cotton oil from a dealer who sells it for what it is, and makes no pretense that it is anything else. That



is the proper way to do. But I have no doubt that hundreds of people are paying for olive oil, and not getting it, to the great detriment of the olive oil industry. So that I think it should be a misdemeanor to sell an article for what it is not; and we must remember that the question is not whether the article is a linen handkerchief, but that it is a matter of human food.

Prof. Tucker. I agree with you that goods should be as represented.

Dr. Wiley. You are not familiar with what the State Board of Agriculture has done in regard to dairy products and vinegar?

Prof. Tucker. I should rather not speak for them. They have a department of chemistry in Albany and other places throughout the state.

Dr. Wiley. I entirely agree with Professor Tucker concerning erroneous opinions regarding food adulteration. It is not nearly as bad as represented, but if it exists at all it should receive public attention. Is there any other statement that you would like to make, Dr. Tucker, for the benefit of the committee in regard to your work in connection with the Board of Health of the State in respect to the control of food products, or as to the method in which Federal legislation might help you in your work? If there is any suggestion you can make in that line it would be useful to the committee.

Prof. Tucker. I do not know that there is any suggestion that I could make, because that involves legal considerations that I have not considered—as to how largely the national government could control the sale of articles made outside the state, in a state, or if in the state, their sale in that same state.

Dr. Wiley. Of course, the national Congress could not enact laws for the benefit of the state, but it could control commerce as between the states, so that if the sale took place in one state, and the manufacture took place in another, they could punish for the wrong doing. The chief object of a state law would be to supplement that and make it effective. I do not think that it is the purpose of this committee of the Senate, or of anyone else to propose the enactment of a law having any restrictive provisions with regard to commerce in food products. On the contrary, the largest liberty could be allowed, and would be allowed, under such a law. The only point to be established and required would be that complete honesty should characterize interstate dealings in food products.

Prof. Tucker. I believe that the findings or conclusions of such a commission as you refer to would be very valuable, in that they would probably be enacted into law in the various states.

Dr. Wiley. They would be a guide for state legislation; that is a good point.

Prof. Tucker. The boards of health of a state would, I think, regard with much favor any findings of a national commission which was made up of experts in those lines of work, and I think, therefore, that it would be a great gain to the states. It would be doing what a good many states are undertaking to do, or are about doing for themselves. It would give a model for the states.

Dr. Wiley. In a bill that was before the last Congress a provision for such a board or commission was made—a commission to prescribe food standards, etc.

Dr. O'Sullivan. How was the board to be composed?

Dr. Wiley. It was to be composed of physicians, physiologists, etc., and to be appointed by the President of the United States.

Dr. O'Sullivan. Such a board so constituted would be the best instrumentality for determining whether the preservatives that have been under discussion are or are not beneficial.

Prof. Tucker. When there were up before the state legislature some bills regulating the sale or employment of some food article, the interests that favored its use came before the committee, by representatives paid by them, to argue the case. Hence, partisan views are often exploited in this manner, and we do not even get the facts of the case. A commission such as is suggested, would give us the facts.

Dr. O'Sullivan. Not only that, but the action of preservatives whose action is in question can only be settled by an impartial series of experiments conducted by physiological chemists.

Dr. Wiley. In connection with what Dr. Tucker has said as to a model for state legislation, I will state that the Senate of the state of Indiana applied to me last year for a model of a pure food bill. I took a copy of the bill then before Congress, and sent that to them, and that bill was enacted bodily by the legislature of Indiana. So that I think a law of Congress would have this beneficial result, that it would tend to unify the legislation of the states.

The work done and the data furnished in this report is not nearly as complete as we would wish it to be, but we have been crowded for time, and have been unable to make the investigation more extensive.

The series of analyses submitted to the people of Montana for their inspection, however, should prove of great interest. That some provision for our protection is required is manifest.

It should be one of our first duties to take such steps as may seem best adapted to secure foods which shall meet the requirements of the most critical. This can easily be done.

THE MONTANA AGRICULTURAL EXPERIMENT STATION,  
Bozeman, Montana.

Nov. 30, 1900.

CANNED BEANS FOUND ADULTERATED.

Name of Brand	Name of Manufacturer.	Where Manufactured.
1609 String Beans Oval Brand .....	A. Booth Packing Co. ....	Baltimore, Md. ....
1611 Shield Brand .....	J. S. Farren & Co. ....	Baltimore, Md. ....

CANNED BEANS NOT FOUND ADULTERATED.

1581 Magnet Brand .....	Isaac Robinson .....	Baltimore, Md. ....
1588 Gopher Brand .....	Foley Bros. & Kelley Mer. Co. ....	St. Paul, Minn. ....
1604 Jumbo Brand .....	Miller Bros. & Co. ....	Baltimore, Md. ....
1605 Peerless Brand .....	The C. H. Pearson Packing Co. ....	Baltimore, Md. ....
1608 Club House Brand .....	Franklin MacVeagh & Co. ....	Chicago, Ill. ....

CANNED PEASE NOT FOUND ADULTERATED.

1519 Green Island Brand .....	Green Island Packing Co. ....	Green Bay, Wis. ....
1525 Monarch Brand .....	Reid, Murdoch & Co. ....	Chicago, Ill. ....
1603 Fort Snelling Brand .....	Foley Bros. & Kelley Mer. Co. ....	St. Paul, Minn. ....
1582 Club House Brand .....	Franklin MacVeagh & Co. ....	Chicago, Ill. ....
1582 Petits Pois Extras Fins "Le Scie" Malines" .....	Fabrique International .....	France .....
1583 Petits Pois Tres Fins .....	Delory .....	Lorient, France. ....

CANNED CORN NOT FOUND ADULTERATED.

1259 Leopard Brand .....	Geo. R. Newell & Co. ....	St. Paul, Minn. ....
1505 Diamond Brand Sugar Corn .....	Atlantic Canning Co. ....	Atlantic, Iowa .....
1523 Extra Sweet Corn .....	Reid, Murdoch & Co. ....	Chicago, Ill. ....
1590 Seal Brand, Standard Quality .....	P. J. Ritter Conserve Co. ....	Philadelphia, Pa. ....
1602 Fort Snelling Brand .....	Foley Bros. & Kelley Mer. Co. ....	St. Paul, Minn. ....
1607 Club House Brand Extra .....	Franklin MacVeagh & Co. ....	Chicago, Ill. ....
1615 Honey Drop Sugar Corn .....	Davis Baxter & Co. ....	Portland, Me. ....



## SOUPS FOUND ADULTERATED.

Lab. No.	Name of Brand.	Name of Manufacturer.	Where Manufactured.	Preservative.
1348	Huckins Terrapin Soup .....	J. H. W. Huckins & Co.....	Boston, Mass.....	Salicylic acid.....
1586	Van Camp's concentrated Vegetable Soup.....	The Van Camp Packing Co.....	Indianapolis, Ind.....	Salicylic acid.....
1599	Van Camp's Concentrated Mock Turkey Soup.....	The Van Camp Packing Co.....	Indianapolis, Ind.....	Salicylic acid.....
1600	Van Camp's Concentrated Ox Tail Soup.....	The Van Camp Packing Co.....	Indianapolis, Ind.....	Salicylic acid.....
1613	Van Camp's Concentrated Tomato Soup.....	The Van Camp Packing Co.....	Indianapolis, Ind.....	Salicylic acid.....

## SOUPS NOT FOUND ADULTERATED.

1347	Huckin's Green Turtle Soup—White Label.....	J. H. W. Huckins & Co.....	Boston, Mass.....	
1349	French Bouillon .....	Armour Packing Co.....	Kansas City, Mo .....	
1361	Clam Broth .....	Franco-American Food Co .....	New York.....	
1580	French Soups, Mutton.....	Franco-American Food Co .....	New York.....	
1584	French Soup, Chicken .....	Franco-American Food Co .....	New York.....	
1587	Van Camp's Concentrated Chicken.....	The Van Camp Packing Co.....	Indianapolis, Ind.....	
1601	Red Letter Double Concentrated Beef Soup.....	The Mullen-Blackledge Co.....	Indianapolis, Ind.....	
1612	Van Camp's Concentrated Bouillon .....	The Van Camp Packing Co.....	Indianapolis, Ind.....	
1614	Red Letter Consomme.....	The Mullen-Blackledge Co.....	Indianapolis, Ind.....	

## CANNED TOMATOES FOUND ADULTERATED.

Name of Brand	Name of Manufacturer.	Where Manufactured.	Preservative.
1260 Casino Brand Tomatoes	Franklin MacVeagh & Co.	Chicago, Ill.	Salicylic acid
1262 Home Brand Tomatoes	Griggs, Cooper & Co.	St. Paul, Minn.	Salicylic acid
1263 Chicago Best Quality Guaranteed Tomatoes	Steele & Wedeles Co.	Chicago, Ill.	Salicylic acid
1485 Tremaine's Tomatoes	Reid, Murdoch & Co.	Chicago, Ill.	Salicylic acid

## CANNED TOMATOES NOT FOUND ADULTERATED.

1258 Wicomico Tomatoes	T. R. Jones	Quantico, Md.	
1261 Nonpareil Brand Tomatoes	Alameda Canning & Packing Co.	San Francisco, Cal.	
1595 Charm Brand Tomatoes	Franklin MacVeagh & Co.	Chicago, Ill.	
1596 Utah Brand Tomatoes	Craig Bros.	Ogden, Utah	
1597 Red Knight Tomatoes	N. S. Martz	Arcadie, Ind.	
1598 Monumental Brand Tomatoes	W. W. Taylor & Son	Baltimore, Md.	
1498 Ivy Leaf Brand Tomatoes	Thos. D. Miller	Weber, Ind.	

## ANALYSIS OF TOMATO CATSUPS.

Name of Brand	Name of Manufacturer.	Where Manufactured.	Preservative.	Color Matter.
1257 Snider's Home-made Catsup	T. A. Snider Preserve Co	Cincinnati, O.	Salicylic acid.	Coal Tar Dye.
1269 Priscilla	Franklin MacVeagh & Co	Chicago, Ill.	Salicylic acid.	Coal Tar Dye.
1303 Blue Label	Curtice Brothers Co.	Rochester, N. Y.	Salicylic acid.	Coal Tar Dye.
1365 Tart Tomato Catsup, Standard Brand	P. J. Ritter Conserve Co	Philadelphia, Pa.	Benzole acid	Coal Tar Dye.
1366 Favorite Brand Tomato Ketchup	P. J. Ritter Conserve Co	Philadelphia, Pa.	Salicylic acid.	Coal Tar Dye.
1367 Shrewsbury Puree of Tomatoes	E. C. Hagar & Co.	Shrewsbury, N. J.	Salicylic acid.	Coal Tar Dye.
1368 Shrewsbury Puree of Tomatoes	Kuned Pickle Co.	Denver, Col.	Salicylic acid.	Coal Tar Dye.
1368 Eagle Brand Tomato Ketchup	The Tip Top Ketchup Co.	Chicago, Ill.	Benzole acid	Coal Tar Dye.
1599 Sunny Side Ketchup	Reid, Murdoch & Co.	Cincinnati, O.	Acid Sulphite	Coal Tar Dye.
1597 Extra Tomato Catsup	Standard Packing Co.	St. Louis, Mo.	Salicylic acid.	Coal Tar Dye.
1558 Standard Tomato Catsup	Geo. A. Bayle	St. Louis, Mo.	Acid Sulphite	Coal Tar Dye.
1508 Bayle's Tomato Catsup	Gordon & Dilworth	New York, N. Y.	Salicylic acid.	Coal Tar Dye.
1494 New Process	Gordon & Dilworth	New York, N. Y.	Salicylic acid.	Coal Tar Dye.

## JAMS, JELLIES AND PRESERVES, ALL ADULTERATED.

Lab. No	Name of Brand.	Name of Manufacturer.	Where Manufactured	Preservative.	Coloring Matter.	Remarks.
1265	Eagle Jams, Grape Compound .....	Anderson Preserving Co. ....	Camden, N. J. ....	Salticylic acid	Coal Tar Dye .....	Starch Paste and Glucose
1266	Eagle Jams, Pineapple Compound .....	Anderson Preserving Co. ....	Camden, N. J. ....	Salticylic acid	Coal Tar Dye .....	Starch Paste and Glucose
1268	Eagle Jams, Raspberry Compound .....	Anderson Preserving Co. ....	Camden, N. J. ....	Salticylic acid	Coal Tar Dye .....	Starch Paste and Glucose
1481	Queen Black Raspberry Jam .....	Franklin MacVeagh & Co. ....	Chicago, Ill. ....	Salticylic acid	Coal Tar Dye .....	Glucose
1482	Queen Blackberry Jam .....	Franklin MacVeagh & Co. ....	Chicago, Ill. ....	Salticylic acid	Coal Tar Dye .....	Starch Paste and Glucose
1483	Queen Strawberry Jam .....	Franklin MacVeagh & Co. ....	Chicago, Ill. ....	Salticylic acid	Coal Tar Dye .....	Glucose
1486	Queen Red Raspberry Jam .....	Franklin MacVeagh & Co. ....	Chicago, Ill. ....	Salticylic acid	Coal Tar Dye .....	Starch Paste and Glucose
1487	Queen Apricot Jam .....	Franklin MacVeagh & Co. ....	Chicago, Ill. ....	Salticylic acid	Coal Tar Dye .....	Glucose
1488	Queen Green Gage Jam .....	Franklin MacVeagh & Co. ....	Chicago, Ill. ....	Salticylic acid	Coal Tar Dye .....	Starch Paste and Glucose
1489	Queen Currant Jam .....	Franklin MacVeagh & Co. ....	Chicago, Ill. ....	Salticylic acid	Coal Tar Dye .....	Glucose
1490	Queen Cherry Jam .....	Franklin MacVeagh & Co. ....	Chicago, Ill. ....	Salticylic acid	Coal Tar Dye .....	Starch Paste and Glucose
1491	Queen Peach Jam .....	Franklin MacVeagh & Co. ....	Chicago, Ill. ....	Salticylic acid	Coal Tar Dye .....	Glucose
1495	Queen Pineapple Jam .....	Franklin MacVeagh & Co. ....	Chicago, Ill. ....	Salticylic acid	Coal Tar Dye .....	Glucose
1496	Queen Gooseberry Jam .....	Franklin MacVeagh & Co. ....	Chicago, Ill. ....	Salticylic acid	Coal Tar Dye .....	Glucose
1497	Queen Pear Jam .....	Franklin MacVeagh & Co. ....	Chicago, Ill. ....	Salticylic acid	Coal Tar Dye .....	Glucose
1522	Extra Grated Pineapple .....	Reid, Murdoch & Co. ....	Chicago, Ill. ....	Salticylic acid	Coal Tar Dye .....	Starch Paste and Glucose
1552	Pure Fruit Jams, Blackberry .....	Reid, Murdoch & Co. ....	Chicago, Ill. ....	Salticylic acid	Coal Tar Dye .....	Glucose
1553	Genesee Fresh Fruit Jam, Currant .....	Batavia Preserving Co. ....	Genesee Co., N. Y. ....	Salticylic acid	Coal Tar Dye .....	Glucose
1585	Gopher Brand Preserved Strawberries .....	Foley Bros. & Kelly Mfg. Co. ....	St. Paul, Minn. ....	Salticylic acid	Coal Tar Dye .....	Glucose
1615	D. & B. Brand, Extra Quality, Raspberry Preserves .....	Dodson-Brown Mfg Co. ....	St. Louis, Mo. ....	Salticylic acid	Coal Tar Dye .....	Glucose
1616	D. & B. Brand Strawberry Preserves .....	Dodson-Brown Mfg Co. ....	St. Louis, Mo. ....	Salticylic acid	Coal Tar Dye .....	Glucose
1617	Red Currant Jelly .....	Gordon & Dilworth .....	New York .....	Salticylic acid	Coal Tar Dye .....	Starch Paste and Glucose
1618	Extra Quality Blackberry Jelly .....	Philip J. Ritter Conserve Co. ....	Philadelphia .....	Salticylic acid	Coal Tar Dye .....	Glucose
1619	Extra Quality Currant Jelly .....	Philip J. Ritter Conserve Co. ....	Philadelphia .....	Salticylic acid	Coal Tar Dye .....	Glucose
1620	Favorite Brand Compound Currant Flavored Jelly .....	Philip J. Ritter Conserve Co. ....	Philadelphia .....	Salticylic acid	Coal Tar Dye .....	Glucose
1621	Favorite Brand Compound, Strawberry Jelly Flavor .....	Philip J. Ritter Conserve Co. ....	Philadelphia .....	Salticylic acid	Coal Tar Dye .....	Glucose

## ANALYSIS OF CEREAL BREAKFAST FOODS.

Labo'y	Name of Article and by Whom Manufactured.	Per Cent Water	Per Cent Nitrogen	Crude Pro- tein per c't	Per Cent Ash.
1537	Oat Meal Wafers, Nebraska Sanitarium, Sanitarium Bakery College View, Neb.	5.35	1.56	9.72	1.16
1538	Graham Crackers, Nebraska Sanitarium, Sanitarium Bakery, College View, Neb.	5.11	1.79	11.19	1.71
1539	Whole Wheat Wafers, Neb. Sanitarium, Sanitarium Bakery, College View, Neb.	5.91	1.78	11.13	1.19
1540	Oat Meal Crackers, Nebraska Sanitarium, Sanitarium Bakery College View, Neb.	4.84	1.84	11.50	1.22
1541	Granose Biscuit, Battle Creek Sanitarium Health Food Co., Battle Creek, Mich.	6.86	1.86	11.63	2.36
1542	Zweiback, Battle Creek Sanitarium Health Food Co., Battle Creek, Mich.	6.66	1.92	11.90	1.49
1543	Cream Shortened Sticks, Battle Creek Sanitarium Health Food Co., Battle Creek	5.30	1.53	9.56	1.09
1533	Pillsbury's Vitos, Pillsbury-Washburn Flour Mills Co., Minn.	6.29	2.07	12.94	.94
1577	Oat Meal, Bozeman Milling Co. Mfg., by Sioux Milling Co., Sioux City, Iowa.	7.16	2.51	15.69	1.85
1527	Rolled Avena, The American Cereal Co., F. Schumacher Mills, Akron, Ohio.	6.64	2.36	14.75	2.16
1528	Rolled White Pure Quaker Oats, American Cereal Co., Chicago, Ill.	6.66	2.27	14.19	1.86
1532	Hornby's Oat Meal, The H.-O. Co., Clover Mills, Buffalo, N. Y.	8.31	2.39	14.94	1.84
1534	Buckeye Rolled Oats, American Cereal Co., Chicago, Ill.	6.83	2.27	14.19	1.97
1576	White Corn Meal, Sioux Milling Co., Sioux City, Iowa.	10.21	1.22	7.63	.73
1526	Granose Flakes, Battle Creek Sanitarium Health Food Co., Battle Creek, Mich.	10.08	2.33	15.56	3.35
1529	Wheat Gulten, Battle Creek Sanitarium Health Food Co., Battle Creek, Mich.	5.25	2.71	16.95	.97
1531	Wheatena Health Food Co., New York City.	6.55	2.21	13.81	1.81
1535	Shredded Whole Wheat Biscuit, The Shredded Wheat Co., Worcester, Mass.	6.25	1.79	11.18	1.65
1569	Granola, Sanitarium Bakery, College View, Nebraska	4.95	2.31	14.44	1.72
1560	Ralston Health Club Barley Food, Purina Mills, St. Louis, Mo.	7.82	2.01	12.56	1.62
1561	Grape Nuts, Postum Cereal Co., Battle Creek, Mich.	3.62	1.89	11.81	2.07
1562	Cracked Wheat, American Cereal Co., Chicago, Ill.	7.38	1.48	9.25	1.87
1563	Flaked Oat Food, Pillsbury-Washburn Co., Minneapolis, Minn.	4.94	2.30	14.38	2.02
1564	Granut, Battle Creek Sanitarium Health Food Co., Battle Creek, Mich.	5.14	1.46	9.13	.24
1565	Pettijohn's Breakfast Food, American Cereal Co., Chicago, Ill.	7.51	1.70	10.63	1.87
1567	Rice Flakes, Leuhoff Bros., Detroit, Mich.	6.48	1.26	7.88	.47
1568	Wheatine, Empire Milling Co., San Francisco, Cal.	7.92	1.65	10.31	1.84
1569	Cream of Wheat, Cream of Wheat Co., Minneapolis, Minn.	8.10	1.87	11.69	.56
1570	Sioux Wheat Flakes, Sioux Milling Co., Sioux City, Iowa.	8.20	1.61	10.06	1.66
1571	Ralston Health Breakfast Food, Purina Mills, St. Louis, Mo.	7.71	1.68	10.50	1.01



## ANALYSES OF BAKING POWDERS. CREAM OF TARTAR POWDERS.

BRAND.	Manufacturer.	Where Manufactured.	Filler.	Available Carbonic Acid Gas, cts pr lb	Volume Carbonic Acid Gas, cts pr lb	Value Terms cts pr lb	Price per lb
Laboratory No.							
1273 Schillings' Best	A. Schilling & Co.	San Francisco, Cal.	None	14.65	163.5	.40	.40
1274 Price's Cream	Price Baking Powder Co.	Chicago, Ill.	Starch	13.70	155.5	.37	
1272 Golden Gate	S. A. Folger & Co.	San Francisco, Cal.	None	12.84	150.4	.36	
1550 Royal	Royal Baking Powder Co.	New York City, N. Y.	Starch	12.63	142.4	.34	
1651 Club House	Franklin MacVeagh & Co.	Chicago, Ill.	Starch	11.16	125.8	.30	.35
1652 Monarch	Reid, Murdoch & Co.	Chicago, Ill.	Starch	9.55	107.7	.26	

## ALUM POWDERS.

1653 Home	Home Baking Powder Co.	San Francisco, Cal.	Starch	7.76	87.0		.16
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## ALUM-PHOSPHATE POWDERS.

1654 Calumet	Cal. Baking Powder Co.	Chicago, Ill.	Starch	11.29	127.25		.35
1655 Chapman	Chapman & Smith Co.	Chicago, Ill.	Starch	7.25	83.9		
1656 K. C.	Jaques Manufacture Co.	Chicago, Kansas City, Omaha	Starch	9.58	107.9		.16
1657 Mountain Top	Courtney & Co.	Butte, Mont.	Starch	6.55	73.9		
1658 Palace	McCormick, Behnke & Co.	St. Paul, Minn.	Starch	6.27	69.6		
1660 Perfect	Perfect Baking Powder Co.	St. Louis, Mo.	Starch	5.41	61		
1661 Silver Queen	A. Booth	Butte, Mont.	Starch	4.15	46.8		

## PHOSPHATE AND SULPHATE POWDERS.

1662 Snowdrift	R. C. Wallace & Co.	Helena, Mont.	Starch	11.13	127.5		
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\* Volume of gas liberated from one ounce of baking powder calculated to the normal pressure existing at Bozeman and to the temperature of 70 degrees Fahrenheit.

TABLE OF FLOUR ANALYSES.

Labo'y	Brand.	Miller and Town.	Moisture.	Nitrogen per cent	Crude Pro- tein per ct
1174 XXXX.....		Big Timber M. Co. B. T.....	9.55	1.72	10.75
1173 Royal.....		Bozeman M. Co., Bozeman.....	10.05	1.92	12.00
97 Economy.....		Bozeman M. Co., Bozeman.....	10.00	1.55	9.69
102 Ceretana.....		Bozeman M. Co., Bozeman.....	10.03	2.38	14.87
100 Pillsbury's Best.....		Pillsbury Washburn Co., Minneapolis, Minn.....	9.05	2.20	13.75
98 Saskatchewan.....		N. Story & Co., Bozeman.....	10.23	2.00	12.50
99 Montana Belle.....		N. Story & Co., Bozeman.....	10.31	1.60	10.00
113 Occidental.....		Bozeman Milling Co.....	10.00	2.48	15.50
114 Ceretana.....		Bozeman Milling Co.....	10.51	2.14	13.38
115 Gilt Edge.....		Bozeman Milling Co.....	10.17	2.42	15.13
116 Electric Light.....		Bozeman Milling Co.....	10.21	2.37	14.81
117 Choice.....		Bozeman Milling Co.....	10.35	2.35	14.69
119 Royal.....		Bozeman Milling Co.....	10.11	2.50	15.63
120 Best.....		Bozeman Milling Co.....	9.75	2.14	13.34
1612 Sun Facy Patent.....		Bozeman Milling Co.....	10.94	1.70	10.63
1613 Star Clear.....		Bonner Milling Co., Bonner, Mont.....	10.68	1.76	11.00
1616 Rose Straight.....		Bonner Milling Co., Bonner, Mont.....	11.38	1.81	11.31
1575 Whole Wheat Flour.....		Bozeman Milling Co.....	9.56	1.41	8.81

## MISCELLANEOUS FOODS FOUND ADULTERATED.

Name of Brand	Name of Manufacturer.	Where Manufactured.	Preservative.
1367 Rex Pork and Beans with Tomato Sauce	Cudahy Canning Co.	South Omaha, Neb.	Salicylic
1316 Veal Loaf	Libby, McNeill & Libby	Chicago, Ill.	Boric Acid
1317 Durkee's Salad Dressing	E. R. Durkee & Co.	New York	Salicylic
1318 Deviled Crab	Tangier Packing Co.	Crisfield, Md.	Boric Acid
1319 Deviled Ham	Underwood Co.	Boston, Mass.	Boric Acid
1350 Canned Corned Beef	Libby, McNeill & Libby	Chicago, Ill.	Boric Acid
1358 Heinz's Baked Beans with Tomato Sauce	H. J. Heinz & Co.	Pittsburg, Pa.	Salicylic
1436 Gold Brand Sweet Potatoes	Batesville Canning Co.	Batesville, Miss.	Salicylic
1499 Breck's Grape Juice	F. A. Breck	Vineland, N. J.	Salicylic
1493 Monarch Tomato Picnic Sauce Baked Beans	Reid, Murdoch & Co.	Chicago, Ill.	Salicylic
1521 Choice Selected Beans with Tomato Sauce	H. J. Heinz & Co.	Pittsburg, T. S. A.	Salicylic
1362 Boston Baked Beans	Grocers Packing Co.	Boston, Mass.	Salicylic
1364 Club House Brand	Franklin MacVeagh & Co.	Chicago, Ill.	Salicylic
1534 Monarch Brand, Extra Salmon	Reid, Murdoch & Co.	Chicago, Ill.	Boric Acid
1614 Red Letter Concentrated Consomme Soup	The Mullen-Blackledge Co.	Indianapolis, Ind.	Boric Acid

## MISCELLANEOUS FOODS NOT FOUND ADULTERATED.

1264 Oysters, Best Quality	Steele-Weddes Co.	Chicago, Ill.	
1359 White Label Clear Consomme	Armour Packing Co.	Kansas City, Mo.	
1349 Yacht Club Salad Dressing	Tildesley & Co.	Chicago, Ill.	
1484 Pork and Beans	Franklin MacVeagh & Co.	Chicago, Ill.	
1492 Eagle Condensed Mince Meat	Franklin MacVeagh & Co.	Chicago, Ill.	
1500 Unfermented Grape Juice	Sanitarium Health Food Co.	Battle Creek, Mich.	
1501 Sanitarium Brand Nut Seasoned Baked Beans with Tomato Sauce	Sanitarium Health Food Co.	Battle Creek, Mich.	
1502 Sanitarium Brand Nut seasoned Baked Beans with Tomato Sauce	Sanitarium Health Food Co.	Battle Creek, Mich.	
1510 Pioneer Brand, Minced Sea Clams	Sea Beach Pickling Works	Warrenton, Oregon	
1520 Nuttose	Sanitas Nut Food Co., Sld	Battle Creek, Mich.	
1524 Monarch Brand Extra Oysters	Reid, Murdoch & Co.	Chicago, Ill.	
1589 Gopher Brand Extra Selected Succotash	Foley Bros. & Kelley Mer. Co.	St. Paul, Minn.	
1591 Club House Brand Extra Selected Oysters	Franklin MacVeagh & Co.	Chicago, Ill.	

## ANALYSIS OF VINEGARS.

Lab. No.	Manufacturer.	Place of Manufacture.	Selling Price Per Gal.	Sulphates.	Chlorides.	Coloring Matter.	Per Cent. Solids.	Per Cent. Ash.	Ash Alk. or Neut. Alk.	Flame.	Sold as—	Per Cent. Acetic Acid.	Remarks.
1623 F.	C. Johnson	Kishwaukee, Ill.	\$.50	None	None	None	1.9	.28	Alk.	Pot.	Cider Vin.	5.55	Is an apple cider vinegar.
1624 F.	C. Johnson	Kishwaukee, Ill.	.50	Trace.	Trace.	None	2.32	.46	Alk.	Pot.	Ap. Cider Vin.	5.15	Is an apple cider vinegar.
1625 F.	C. Johnson	Kishwaukee, Ill.	.50	None	None	None	2.23	.23	Alk.	Pot.	Cider Vin.	3.2	Is diluted apple cider vinegar.
1626 F.	C. Johnson	Kishwaukee, Ill.	.50	Trace.	None	None	2.90	.44	Alk.	Pot.	Cider Vin.	5.55	Is an apple cider vinegar.
1627 H.	J. Heinz & Co.	Pittsburg, Pa.	.60	Trace.	Trace.	None	.16	.63	Alk.	Pot. & Sod	Pickling Vin.	5.45	Is a malt vinegar.
1628	Smith Refining Works.	Council Bluffs, Ia.	.40	None	None	Caramel	.351	.021	Alk.	Pot. & Sod	Common Vin.	8.60	Probably an acid vinegar.
1629	Smith Refining Works.	Council Bluffs, Ia.	.55	None	None	Caramel	.88	.052	Alk.	Pot. & Sod	Weakened Vin.	4.75	Probably an acid vinegar.
1630 A.	Steinhorst	Kansas City, Kas	* Trace.	Trace.	None	Caramel	.26	.065	Alk.	Pot. & Sod.	Cider Vin.	6.59	Probably a malt vinegar.
1631	Could not obtain	Did not know	.40	None	None	Caramel	.23	.055	Alk.	Pot. & Sod.	Cider Vin.	3.67	Probably a malt vinegar.
1632			.40	None	None	None	2.78	.46	Alk.	Pot.	Not so'd.	1.4	An apple cider vinegar.
1633	Cross & Blackwell	Vienna and Phila.	1.80	Trace.	None	Caramel	3.05	.28	Alk.	Pot. & Sod	Malt.	4.95	Sold in qt. bot. pure malt vin.
1634	Wallace & Gregory Bros.	Paducah, Ky.	.60	None	None	Caramel	.39	.053	Alk.	Pot. & Sod.	Cider Vin.	7.88	Without doubt a malt vinegar.
1635	Wallace & Gregory Bros.	Paducah, Ky.	.40	None	None	Caramel	.169	.08	Alk.	Pot. & Sod.	Cider Vin.	2.35	Without doubt a malt vinegar.
1636	Wallace & Gregory Bros.	Paducah, Ky.	.40	None	None	Caramel	.38	.068	Alk.	Pot. & Sod	Cider Vin.	9.00	Without doubt a malt vinegar.
1637	Wallace & Gregory Bros.	Paducah, Ky.	.80	None	None	Caramel	.33	.068	Alk.	Pot. & Sod	Cider Vin.	4.9	Without doubt a malt vinegar.
1638	Wallace & Gregory Bros.	Paducah, Ky.	.50	Trace	None	Caramel	.27	.075	Alk.	Pot. & Sod.	Cider Vin.	5.20	Without doubt a malt vinegar.
1639	Wallace & Gregory Bros.	Paducah, Ky.	.40	None	None	Caramel	.239	.018	Alk.	Pot. & Sod.	Cider Vin.	7.25	Without doubt a malt vinegar.
1640	Wallace & Gregory Bros.	Paducah, Ky.	.35	None	None	Caramel	.176	.014	Alk.	Pot. & Sod.	Cider Vin.	4.475	Without doubt a malt vinegar.
1641	Wallace & Gregory Bros.	Paducah, Ky.	Trace.	Trace.	None	Caramel	1.00	.23	Alk.	Pot. & Sod.	Cider Vin.	4.70	Without doubt a malt vinegar.
1642	Wallace & Gregory Bros.	Paducah, Ky.	.50	Trace.	Trace.	Caramel	.68	.29	Alk.	Pot. & Sod.	Cider Vin.	3.825	Without doubt a malt vinegar.
1643	Wallace & Gregory Bros.	Paducah, Ky.	.60	Trace	None	Caramel	.306	.054	Alk.	Pot. & Sod	Ap. Cider Vin.	4.475	Without doubt a malt vinegar.
1644	Wallace & Gregory Bros.	Paducah, Ky.	.40	None	None	Caramel	.25	.029	Alk.	Pot. & Sod.	Ap. Cider Vin.	4.65	Without doubt a malt vinegar.
1645	Wallace & Gregory Bros.	Paducah, Ky.	.35	None	None	Caramel	.19	.021	Alk.	Pot. & Sod.	Ap. Cider Vin.	5.20	Without doubt a malt vinegar.
1646	Wallace & Gregory Bros.	Paducah, Ky.	.40	None	None	None	.21	.07	Alk.	Pot. & S'd.	White Wine V.	8.9	Prob. a vin. made from glucose.
1647	Wallace & Gregory Bros.	Paducah, Ky.	.....	None	None	None	.14	.027	Alk.	Pot. & Sod.	White Wine V.	4.125	Prob. a vin. made from glucose.
1648 F.	C. Johnson	Kishwaukee, Ill.	.....	None	None	None	1.47	.50	Alk.	Pot.	Ap. Cider Vin.	5.625	An apple cider vinegar.
1649	Wallace & Gregory Bros.	Paducah, Ky.	.....	Trace.	None	None	2.30	.32	Alk.	Pot.	Given as Ap. C.	4.625	An apple cider vinegar.

\* Refused.



# THE PRECINCT ELECTION RETURNS OF THE STATE OF MONTANA FOR THE ELECTION HELD NOVEMBER 6, 1900.

OFFICIAL ELECTION RETURNS FOR BEAVERHEAD COUNTY, FOR ELECTION HELD NOVEMBER 6TH, 1900.

PRECINCTS.	President.			Mem. of Congress.			Governor.			Lieut. Governor.			Sec. of State.			Attorney General.			Treasurer.			Auditor.		
	McKinley, r.....	Bryan, f.-d.....	Edwards, f.-d..	Murray, r.....	Kelley, i.-d.....	Toole, f.-d.....	Folsom, r.....	Hogan, i.-d.....	Higgins, f.-d.....	Bennett, r.....	Marion, i.-d.....	Hays, i. and f.-d..	Yoder, r.....	Donovan, f.-p....	Porter, r.....	Stewart, i.-d.....	Barret, f.-d.....	Edwards, r.....	Livingston, i.-d..	Calderhead, -f.p..	Proctor, r.....			
Argenta.....	15	20	19	15	1	21	13	1	20	14	14	19	15	18	15	15	20	14	14	19	15			
Pannack.....	68	66	63	67	.....	68	65	.....	65	65	65	65	67	65	67	67	64	68	68	63	67			
Barrett.....	6	12	12	5	1	12	5	.....	12	5	5	14	4	12	4	4	12	4	4	12	5			
Blacktail.....	36	32	24	33	8	28	32	.....	25	16	16	31	36	26	21	16	27	35	5	25	36			
Bishops.....	17	21	21	16	.....	21	15	.....	21	23	23	23	21	22	22	23	20	17	.....	21	16			
Birch Creek.....	25	23	22	24	.....	23	24	.....	23	23	23	23	23	22	22	23	22	22	.....	22	24			
Big Hole 15.....	13	37	36	14	1	37	13	.....	37	14	14	38	13	37	13	1	36	13	1	38	13			
Dewey's.....	18	59	52	17	2	55	18	.....	55	16	16	55	17	53	17	1	54	17	2	53	17			
Dell.....	38	33	32	38	1	32	39	.....	32	39	1	33	39	30	40	1	30	39	1	30	40			
Dillon.....	272	247	234	261	13	272	263	.....	242	264	11	250	251	277	262	11	251	257	7	239	262			
Jackson.....	51	77	69	54	1	75	49	.....	71	50	1	69	50	64	50	1	72	49	.....	69	47			
Glendale.....	13	41	38	13	2	39	14	.....	37	18	2	38	15	37	13	2	35	15	2	36	15			
Hecla.....	22	34	37	18	1	38	17	.....	37	18	1	37	18	36	18	1	37	18	.....	34	18			
Lima.....	64	66	57	65	2	61	62	.....	60	61	1	61	63	59	62	1	58	58	7	62	60			
Pioneer.....	2	11	10	2	.....	11	2	.....	10	2	.....	8	3	8	3	.....	8	3	.....	8	3			
Polaris.....	16	23	18	21	.....	20	20	.....	20	19	.....	19	22	19	20	.....	16	22	.....	20	19			
Redrock.....	19	29	30	19	.....	30	19	.....	30	19	.....	29	19	29	19	.....	29	19	.....	28	19			
Big Hole 16.....	42	70	69	42	.....	72	39	.....	70	42	.....	69	42	68	42	.....	70	44	.....	69	43			
Horse Prairie.....	30	36	35	29	.....	35	21	.....	35	29	.....	36	30	35	30	.....	35	30	1	35	30			
Totals.....	767	937	878	753	37	937	739	.....	902	749	27	915	753	881	750	27	896	745	28	883	749			
Pluralities.....	170	125	125	125	37	191	191	.....	153	.....	.....	162	.....	131	.....	.....	151	.....	.....	174	.....			

## SEVENTH ANNUAL REPORT OF BUREAU

## BEAVERHEAD COUNTY--Continued.

Auditor	Supt., Pub. Inst.	Asso. Justice Supreme Court.	Judges 5th District.	State Senator	Members of Legislature.	Clerk of District Court.	Sheriff.	Treasurer.										
McLean, i.-d . . . .	Welch, f.-l. ....	Milburn, -f.d. ....	Von Tobel, r. ....	Word, i.-d. ....	Parker, d. ....	Willis, r. ....	Murray, d. ....	Davidson, r. ....	Metlen, d. ....	Hill, d. ....	Noyes, r. ....	Anderson, r. ....	French, d. ....	Price, r. ....	Padley, d. ....	Moore, r. ....	Edinger, d. ....	Innes, r. ....
Argentia.....	18	15	20	14	.....	20	13	19	15	18	20	17	20	15	19	16	18	17
Bannack .....	60	69	36	67	.....	64	68	64	69	65	63	59	53	80	63	71	58	74
Barrett.....	1	12	1	5	1	14	27	12	5	12	14	5	4	13	4	13	4	5
Blacktail.....	6	25	26	34	5	41	18	32	35	33	27	34	27	30	30	38	37	37
Bishops .....	21	16	21	16	.....	25	12	20	25	23	19	21	21	15	20	18	19	19
Birch Creek .....	21	24	23	22	.....	29	18	21	25	23	25	24	24	30	24	21	21	21
Big Hole 15.....	36	13	36	13	1	38	12	39	11	40	39	11	10	33	19	13	13	13
Dewey's .....	53	18	53	16	2	56	56	17	55	56	51	18	17	49	24	29	51	21
Dell .....	30	38	31	38	1	33	39	32	38	36	34	38	32	40	31	39	34	36
Dillon.....	1	.....	1	.....	.....	269	250	262	255	260	255	248	254	250	273	253	262	251
Jackson .....	69	49	72	49	1	69	55	71	49	78	74	47	50	63	75	53	72	65
Glendale .....	1	.....	1	.....	.....	40	14	33	16	37	35	13	16	35	18	31	23	15
Hecla .....	35	15	37	13	2	40	16	29	25	36	36	13	15	25	28	26	31	23
Lima .....	2	61	63	63	2	63	60	68	57	60	63	66	60	66	60	68	59	63
Pioneer .....	8	3	9	3	.....	6	5	10	3	11	8	3	2	9	6	7	7	10
Polaris.....	19	14	20	16	.....	16	24	27	17	22	21	18	13	26	24	16	21	19
Redrock .....	28	19	29	19	.....	29	29	31	18	32	31	16	17	31	28	30	30	18
Big Hole 16.....	68	44	70	41	.....	70	41	70	42	62	60	48	49	64	62	51	48	48
Horse Prairie .....	1	34	30	30	2	34	30	31	35	38	35	27	31	34	32	32	31	33
Totals .....	878	746	893	737	35	953	723	926	750	937	915	737	854	821	904	893	808	777
Pluralities .....	132	.....	156	.....	.....	230	.....	176	.....	200	208	.....	33	.....	101	.....	121	.....

## BEAVERHEAD COUNTY—Continued.

PRECINCTS.	Clerk and Recorder.		Assessor.		County Attorney.		Supt. of Schools.		Administrator		Coroner.		Surveyor		County Commissioners.	
Staudaher, d....	14	21	13	22	18	17	20	16	26	8	20	15	24	18	17	18
Baker, r....	61	71	57	72	59	74	57	75	60	71	56	74	68	58	68	69
	12	5	11	6	12	5	13	4	12	4	12	4	12	12	12	6
Barrett.....	37	28	26	40	35	33	29	38	29	37	35	33	33	30	36	35
Blacktail.....	24	12	17	20	17	18	21	16	16	21	16	21	22	18	16	15
Bishops.....	26	21	18	29	26	21	22	22	21	24	19	27	29	26	22	24
Birch Creek.....	35	15	32	16	36	14	33	18	34	15	36	13	39	43	33	19
Big Hole 15.....	52	21	60	21	49	21	51	23	52	20	53	19	52	22	49	47
Dewey's.....	35	35	27	46	35	31	32	40	28	43	33	39	76	56	54	48
Dell.....	269	246	234	289	264	255	275	248	268	253	243	273	265	248	251	262
Dillon.....	73	47	55	66	67	57	69	54	67	52	70	50	76	70	54	48
Jackson.....	36	17	38	14	37	15	39	14	38	14	40	13	39	37	36	14
Glendale.....	31	23	31	23	29	25	33	22	34	19	34	19	39	33	18	19
Hoola.....	57	70	59	64	67	63	64	61	57	71	61	64	63	56	54	61
Lima.....	6	6	6	6	5	6	7	6	9	3	11	2	11	10	2	9
Pioneer.....	16	24	20	22	17	19	17	22	20	19	20	18	25	23	18	18
Polaris.....	29	20	23	25	29	19	29	20	20	27	27	21	30	27	26	19
Redrock.....	69	43	57	54	63	48	69	40	65	44	64	46	70	75	59	35
Big Hole 16.....	33	30	35	30	32	32	36	28	36	27	34	23	38	32	31	26
Horse Prairie.....																
Totals.....	914	755	809	885	900	774	916	766	883	761	889	775	974	898	837	747
Pluralities.....	159			56	126		150		132		114			94	33	

## OFFICIAL ELECTION RETURNS FOR BROADWATER COUNTY FOR ELECTION HELD NOVEMBER 6TH, 1900.

PRECINCTS.	President.		Mem. of Congress.		Governor.		Lieut. Gov.		Sec. of State.		Attorney General.		Treasurer.		Auditor.							
	McKinley	Bryan	Edwards	Murray	Kelley	Toole	Folsom	Hogan	Higgins	Bennett	Marion	Hays	Yoder	Donovan	Porter	Stewart	Barret	Edwards	Livingston	Calderhead	Proctor	McLean
Townsend.....	100	200	170	92	50	190	95	17	181	95	18	192	94	178	96	18	168	94	30	183	94	14
Diamond..	14	33	33	11	1	36	9	2	34	10	1	32	11	33	11	1	28	9	5	32	10	
Hassel.....	28	32	32	28	1	5	27		34	27		33	26	31	27		30	29	1	31	29	1
Glenwood ..	5	13	14	5		13	6		13	5		14	9	14	5		14	5		14	5	
Canton.....	19	39	37	17	4	38	18		26	18	36	41	17	34	17	3	38	17	4	35	17	3
Toston.....	39	44	43	45		49	36		45	36		42	36	43	34		41	33	2	42	34	
Radersburg....	44	76	68	40	1	75	42	3	73	37	3	73	40	70	38	3	68	38	7	69	40	3
Winston.....	49	105	91	50	8	108	41	9	102	49	6	103	47	95	47	6	96	46	9	93	45	6
Blackwell.....	11	10	10	1		10	1		10	1		10	1	10	1		10	1		10	1	
E. P. Mine.....	8	15	15	8	1	17	7	1	17	6	1	16	6	15	6	1	15	7	1	16	6	1
Lombard.....	2	1	1	2		1	2		1	2		1	2	1	2		1	2		1	2	
Jefferson River	10	3	4	7	1	5	8		5	8		4	8	4	8	1	5	8		4	8	
Total.....	318	572	518	296	47	571	285	39	551	294	35	561	293	528	292	31	513	289	60	530	291	28
Pluralities....		254	222			282			257			268		236			224			239		



## BROADWATER COUNTY—Continued.

PRECINCTS.	Supt. of Schools.			Associate Justice Supreme Court.		Members Legislature.						Judge 9th District.		Clerk District Court.			Sheriff.			
	Welsh.....	Harmon .....	Leamy .....	Milburn .....	Von Tobel .....	Word, i.-d.....	Cannon, f.-d.....	Rossman, f.-d ...	McKnight, r.....	Rotwitt, r.....	Reed, i.-d .....	Wilder, i.-d....	Armstrong, d.....	Holloway, r.....	Bubser, d.....	Combs, r.....	Hardy, i.-d.....	Poole, f.-d.....	Starkweather, r...	Perkins, i.-d... ..
Townsend.....	175	95	15	172	95	21	131	147	156	94	44	9	176	115	169	131	3	177	105	25
Diamond.....	35	10	.....	30	11	1	28	23	21	13	1	3	32	10	28	14	.....	29	10	4
Hassel.....	30	29	.....	35	27	.....	28	29	36	33	.....	.....	32	29	35	27	.....	34	25	6
Glenwood .....	14	5	.....	14	5	.....	11	10	7	4	.....	.....	13	6	13	6	.....	15	3	19
Canton .....	32	18	4	35	17	4	35	35	20	17	6	.....	13	18	30	26	3	27	18	1
Toston.....	42	34	.....	43	34	.....	37	50	43	32	4	1	41	39	42	42	.....	45	39	2
Radersburg.....	69	40	3	68	41	3	71	90	39	30	6	1	68	48	63	52	1	83	38	10
Winston.....	91	46	6	93	45	7	105	87	45	29	30	5	84	51	79	52	1	115	33	1
Blackwell .....	9	1	.....	10	1	.....	9	9	1	2	1	1	10	1	9	52	.....	9	1	2
E. P. Mine .....	14	5	.....	16	.....	6	21	15	4	5	1	1	12	10	11	7	.....	17	5	.....
Lombard .....	1	2	.....	1	.....	2	1	1	2	2	.....	.....	1	2	1	2	.....	1	2	.....
Jefferson River .....	4	8	.....	3	8	1	5	5	7	7	.....	.....	6	8	4	9	.....	8	6	.....
Total.....	517	295	28	520	284	45	482	501	387	268	76	22	524	337	484	369	8	590	285	70
Pluralities.....	222	.....	.....	236	.....	.....	96	114	.....	.....	.....	.....	187	.....	115	.....	.....	275	.....	.....

## BROADWATER COUNTY—Continued.

PRECINCTS.	Treasurer.		Clerk and Recorder.	Assessor.		County Attorney.		Supt. Schools.	Admin-istrator.	Coroner.		Surveyor.								
	Gurnett, f.-d....	Titman, r. ....	Coad, f.-d....	Johnson, r.....	Doggett, f.-d ....	Dougherty, r.....	Preuitt, i.-d....	Goodman, f.-d..	Cronks, r. ....	Baldwin, i.-d....	Harrington, d....	Murphy, r....	Lyttle .....	Malone, f.-d....	Worthingham, r.,	Brady, i.-d....	Currie, d.....	Wardwell, r.....	McLaughlin, i.-d .	
Townsend.....	186	112	2	170	116	163	48	87	141	105	*53	195	107	162	139	128	9	137	125	8
Diamond..	34	8	.....	26	19	37	6	3	27	12	2	36	4	31	30	9	.....	29	10	.....
Hassel....	40	23	.....	35	27	39	11	11	30	29	5	44	15	32	31	28	.....	29	27	1
Glenwood ..	13	6	.....	10	8	11	4	4	11	7	.....	11	8	12	12	5	.....	15	4	.....
Canton ..	35	25	1	40	23	42	5	14	26	12	16	45	15	36	31	20	4	29	21	4
Toston.....	37	48	.....	42	40	40	29	9	36	38	6	51	32	39	67	33	5	39	37	.....
Radersburg....	70	45	.....	59	56	69	34	16	63	52	4	85	31	61	92	43	1	63	47	2
Winston .....	84	60	3	59	96	77	33	41	69	65	15	116	37	101	92	46	8	69	70	.....
Blackwell .....	8	3	.....	9	2	9	1	1	8	2	.....	10	1	9	8	3	.....	9	1	.....
E. P. Mine .....	16	7	1	10	14	12	6	5	11	9	4	18	7	16	13	7	1	10	9	1
Lombard .....	1	2	.....	1	2	1	2	.....	1	2	.....	1	2	1	1	2	.....	1	2	.....
Jefferson River	4	8	.....	6	7	6	1	.....	4	8	.....	5	7	5	5	7	.....	5	8	.....
Total.....	528	347	7	457	410	506	179	197	427	350	105	617	266	595	464	331	28	435	361	16
Pluralities..	181	.....	.....	57	.....	309	.....	.....	77	.....	.....	351	.....	.....	133	.....	.....	974	.....	.....



## CARBON COUNTY—Continued.

PRECINCTS.	Associate Jus- tice Supreme Court.			Judges of Judicial District.		State Senator.		Members of Legislature.		Clerk Dist. Court		Sheriff.		Treasurer.		Clerk and Recorder.	
Rockvale, . . . . .	55	43	11	48	55	13	52	53	12	47	54	38	48	32	49	55	18
Joliet, . . . . .	54	40	12	49	54	19	43	51	15	33	50	32	32	39	36	56	10
Bridger, . . . . .	70	168	8	69	68	12	171	67	9	138	84	42	42	13	132	74	10
Reno, . . . . .	27	21	2	28	27	3	22	26	1	13	27	23	23	19	15	26	2
Roberts, . . . . .	67	21	18	50	68	28	28	69	14	16	73	25	30	27	29	20	18
East Red Lodge, . . . . .	164	103	65	142	109	92	125	158	59	82	167	117	103	108	109	100	65
West Red Lodge, . . . . .	65	67	39	66	66	69	51	77	65	44	79	65	46	57	58	55	46
Jackson, . . . . .	38	22	7	33	33	18	23	40	7	17	35	21	16	28	25	33	13
Fishail, . . . . .	23	23	13	23	23	15	20	23	18	19	15	25	14	25	10	22	14
Morris, . . . . .	14	41	5	28	11	41	13	39	14	10	36	18	40	16	10	22	13
Absarokee, . . . . .	42	63	16	60	38	23	35	54	38	68	26	35	56	37	36	36	18
Bowler, . . . . .	11	7	3	9	12	4	9	8	4	11	9	9	10	4	10	12	2
Carbonado, . . . . .	65	71	8	76	68	12	67	78	2	58	60	123	24	9	53	74	13
Gebo, . . . . .	57	68	19	72	50	21	46	99	14	45	87	15	40	31	52	68	29
Totals, . . . . .	711	810	226	752	702	827	325	729	244	571	834	447	784	916	633	814	233
Pluralities, . . . . .						124		101			293		141	283		160	



## CARBON COUNTY—Continued.

PRECINCTS.	Assessor.		County Attorney		Supt. of Schools		Administrator		Coroner.		County Surveyor.		County Commissioners.	
	Crockett, r. ....		Reno, f.-d. ....		Cochran, f.-d. ....		Rydberg, f. ....		Davis, f.-p. ....		Lay, f. ....		Frank, r. ....	
Rockvale. . . . .	44	58	14	49	54	45	21	48	44	57	45	44	50	40
Joliet. . . . .	38	55	15	40	62	51	27	38	47	47	51	38	34	34
Bridge. . . . .	151	76	12	155	78	75	20	147	146	81	131	135	154	64
Reno. . . . .	17	34	2	30	25	31	3	19	26	2	17	30	7	33
Roberts. . . . .	17	85	15	31	69	62	29	63	24	65	23	17	22	61
East Red Lodge. . . . .	114	172	54	103	129	137	81	175	105	168	106	94	120	144
West Red Lodge. . . . .	67	85	31	68	72	64	35	77	44	82	53	46	74	54
Jackson. . . . .	22	41	7	29	43	21	35	12	17	39	19	48	32	32
Fishtail. . . . .	25	23	13	20	34	16	16	22	10	26	13	18	21	17
Morris. . . . .	40	52	4	19	42	33	21	44	9	46	11	27	16	41
Absarokee. . . . .	49	60	15	57	60	63	26	61	38	58	49	34	70	42
Bowler. . . . .	10	8	3	8	11	7	4	11	9	9	11	7	11	10
Carbonado. . . . .	38	44	70	49	95	61	20	74	55	73	63	46	50	58
Gebo. . . . .	53	72	23	65	73	72	29	55	50	75	47	39	53	64
Tenkevom, i.-d. ....	14	14												
Fisher, i.-d. ....	22	17												
Duffield, i.-d. ....	29	53												
Nuting, r. ....	53	46												
Smith, r. ....	59	45												
Clark, f. ....	40	34												
Lampert, i.-d. ....	50	34												
Hine, r. ....	44	23												
Lay, f. ....	38	135												
Dutton, i.-d. ....	56	15												
Kelly, r. ....	45	41												
Davis, f.-p. ....	57	13												
McKeever, i.-d. ....	44	12												
Smethurst, r. ....	49	50												
Rydberg, f. ....	48	38												
Feeley, i.-d. ....	21	27												
Dilworth, r. ....	45	51												
Cochran, f.-d. ....	54	38												
Caswell, r. ....	60	62												
Reno, f.-d. ....	49	40												
Ray, i.-d. ....	14	15												
Crockett, r. ....	58	55												
Rosetta, f.-d. ....	44	38												
Totals	655	895	278	723	969	687	339	623	621	852	631	559	701	775
Pluralities	210	210			246					231	157		6	80

## OFFICIAL ELECTION RETURNS FOR CASCADE COUNTY, FOR ELECTION HELD NOVEMBER 6, 1900.

PRECINCTS.	For Congress.			Governor.		Lieut. Governor.		Secretary of State.		Attorney General.		Treasurer.		Auditor.									
	President.	Edwards, f.-p.	Murray, r.	Kelley, i.-d.	Toole, f.-d.	Folsom, r.	Hogan, i.-d.	Higgins, f.-d.	Bennett, r.	Marion, i.-d.	Hays, i. and f.-d.	Yoder, r.	Donovan, f.-p.	Porter, r.	Stewart, i.-d.	Barret, f.-d.	Edwards, r.	Livingston, i.-d.	Calderhead, f.-p.	Proctor, r.	McLean, i.-d.		
Great Falls, 1st ward.....	146	232	193	135	23	246	113	23	226	121	18	228	133	204	143	19	211	133	15	189	175	10	
Great Falls, 2nd ward.....	74	127	126	70	7	130	70	8	127	68	8	118	68	109	78	8	108	76	8	114	84	6	
Great Falls, 3rd ward.....	143	236	235	134	19	253	141	17	242	138	15	251	138	231	147	17	242	135	18	209	173	14	
Great Falls, 4th ward.....	367	398	386	28	429	324	324	31	398	336	27	413	347	369	365	32	374	353	29	343	408	18	
Great Falls, B. & M Smelter	80	27	21	78	4	24	73	4	22	75	3	24	78	22	76	3	24	73	3	20	79	3	
Great Falls Silver Smelter	161	65	57	14	4	65	11	62	11	2	62	13	60	13	2	59	13	3	54	21	2		
Great Falls, Boston Heights	38	46	42	38	3	46	35	4	45	35	3	45	37	39	39	5	40	37	4	42	2		
West Great Falls.....	85	109	114	78	4	117	75	5	14	75	3	117	76	102	83	5	112	83	1	107	88	2	
Union.....	6	8	7	7	7	8	6	7	7	7	7	7	6	6	7	7	7	6	7	7	7	7	
Sun River.....	26	22	22	25	26	22	22	23	23	24	21	24	24	21	25	22	24	24	20	28	28	2	
Mission.....	34	20	18	38	2	19	33	2	18	33	2	19	33	17	33	3	18	33	1	16	34	2	
Hardy.....	13	16	16	13	16	13	13	16	13	13	16	13	13	16	13	13	16	13	13	15	14	2	
Cascade.....	73	93	88	79	92	74	74	3	87	80	3	88	75	81	79	3	85	80	3	86	81	2	
Adel.....	9	23	23	9	23	9	9	23	9	9	23	9	9	22	10	2	24	8	21	11	11	2	
Barker.....	12	40	38	11	42	9	9	40	10	10	10	37	13	33	15	2	38	12	33	16	1		
Milligan.....	16	9	9	1	11	14	14	1	10	14	1	9	15	8	16	2	10	15	8	17	17	1	
Ort.....	24	11	11	24	13	13	13	1	12	23	1	23	11	10	24	2	10	25	11	24	2		
Truly.....	18	13	13	16	2	17	14	1	15	15	1	15	16	11	18	1	14	16	2	7	25	1	
Red Butte.....	24	3	25	20	5	34	19	4	32	21	4	36	20	23	27	5	30	22	4	8	23	6	
Field.....	31	16	13	28	2	17	26	1	11	29	1	15	27	14	27	1	13	25	1	11	31	2	
Sand Coulee.....	75	88	86	74	87	72	72	2	84	76	1	86	74	83	76	1	83	76	2	80	78	1	
Black Butte.....	28	26	23	28	3	23	28	4	22	27	4	26	26	25	26	4	22	28	3	23	28	4	
Evans.....	29	3	29	28	32	28	28	29	25	25	25	26	26	30	25	2	28	26	30	25	25	2	
Logging Creek.....	23	15	15	23	16	22	22	14	23	23	13	23	13	13	23	1	14	23	11	26	11	2	
Monarch.....	4	15	13	4	1	16	4	14	4	4	14	4	4	15	4	1	14	4	12	7	7	7	
Riceville.....	8	33	24	10	2	28	10	2	12	2	2	25	10	22	14	1	24	12	1	21	17	1	
Armington.....	25	32	25	22	3	30	22	3	28	23	1	29	24	27	25	2	27	24	1	23	30	1	
West Belt.....	91	118	63	51	72	63	63	67	85	64	50	114	86	66	89	64	73	68	63	90	63	1	
East Belt.....	69	141	69	68	66	66	63	62	76	61	60	132	68	69	72	64	78	68	62	67	71	65	2
Willow Creek.....	12	29	28	10	21	28	9	3	29	9	2	30	9	26	10	3	28	10	2	27	11	2	
Cora.....	17	14	12	17	3	13	16	1	14	17	1	14	16	10	19	3	14	16	12	18	1	1	
Kibbey.....	30	48	44	30	1	48	40	2	46	31	1	46	32	40	33	3	44	32	1	38	39	1	
Davis Creek.....	17	17	17	13	1	16	17	1	17	17	1	16	15	17	15	1	16	17	13	17	17	1	
Geyser.....	16	13	15	16	1	15	16	14	16	16	1	12	19	13	19	1	13	18	13	12	18	1	
Nelhart.....	30	188	155	36	21	156	40	27	155	36	16	163	40	137	53	20	153	42	12	145	54	12	
Stockett.....	81	94	92	79	94	76	76	2	91	80	2	91	80	87	80	2	89	80	2	88	83	1	
Little Chicago.....	117	45	43	11	46	108	108	5	44	109	3	46	110	43	114	2	42	112	2	42	116	1	

## CASCADE COUNTY—Continued.

PRECINCTS.	President.		For Congress.		Governor.		Lieut. Governor.		Secretary of State.		Attorney General.		Treasurer.		Auditor.							
	McKinley, r....	Bryan, d.....	Edwards, f.-p..	Murray, r.....	Kelley, i.-d..	Toole, f.-d....	Folsom, r.....	Hogan, i.-d..	Higgins, f.-d....	Bennett, r.....	Marion, i.-d..	Hays, f.-d....	Yoder, r.....	Donovan, f.-p....	Porter, r.....	Stewart, i.-d....	Barret, f.-d....	Edwards, r....	Livingston, i.-d....	Calderhead, f.-p ...	Proctor, r....	McLean, i.-d..
Snow Creek.....	11	6	2	9	2	9	52	2	8	9	52	8	52	8	1	1	9	52	9	10	9	52
Little Milwaukee.....	55	7	9	8	7	9	7	7	8	7	7	8	7	7	8	8	7	7	7	6	10	52
Sunnyside.....	21	30	24	23	2	25	23	2	25	23	2	25	24	24	24	2	24	22	2	22	26	2
Box Elder.....	6	18	16	8	1	14	8	1	17	8	1	17	8	14	9	9	14	10	1	16	8	1
Belt Park.....	11	6	5	12	5	5	12	5	5	12	5	5	12	5	12	5	5	12	4	4	13	1
Dry Wolf.....	2007	2281	1942	205	2479	1849	284	2368	1889	239	3518	1926	2152	2041	262	2279	1961	232	2116	2234	209	209
Totals.....	563	239	630	630	630	630	630	630	630	630	630	630	630	630	630	630	630	630	630	630	630	630
Pluralities.....	563	239	630	630	630	630	630	630	630	630	630	630	630	630	630	630	630	630	630	630	630	630

## Members of the Legislature.

## Judge District Court.

## Assoc. Justice Supreme Court.

## Superintendent of Schools.

PRECINCTS.	SCHOOL DISTRICTS.																				
	Welsh, f.-l....	Harmon, r....	Leamy, i.-d....	Milburn, f.-d....	Von Tobel, r....	Word, i.-d....	Leslie, f.-d....	Berry, r....	Thoroughman, f.-d	Wood, f.-d....	Richardson, f.-p....	Connor, f.-l....	Jensen, f.-p....	Clingan, r....	Elliott, r....	Stockett, r....	Pittwod, r....	Coombs, r....	C. F. Murphy, i.-d.	Stork, i.-d....	Rush, i.-d....
Great Falls, 1st ward.....	207	138	11	210	128	25	279	95	216	231	245	200	224	111	121	116	118	146	25	15	16
Great Falls, 2nd ward.....	117	71	8	127	67	7	139	61	102	128	129	114	124	58	59	57	59	66	18	8	8
Great Falls, 3rd ward.....	224	136	18	244	135	17	237	125	242	249	260	232	243	122	129	126	130	135	28	13	9
Great Falls, 4th ward.....	358	366	24	401	328	39	496	272	400	416	431	381	408	300	329	314	309	343	33	25	22
Great Falls, B. & M Smelter.....	81	77	3	22	74	5	41	60	23	25	23	22	23	74	75	76	76	78	4	3	3
Great Falls Silver Smelter.....	58	13	3	58	10	7	69	9	53	53	53	53	52	23	24	24	21	24	6	6	4
Great Falls, Boston Heights.....	42	37	4	44	35	4	56	28	42	41	43	41	45	34	38	34	37	37	6	2	2
West Great Falls.....	113	77	1	110	77	5	122	74	106	113	114	109	108	71	75	75	72	76	8	2	4
Ulm.....	8	6	8	8	6	7	7	6	7	7	7	8	7	6	6	6	6	6	6	6	6
Sun River.....	21	25	23	23	24	24	25	23	25	26	26	24	23	22	22	21	23	24	24	24	24
Mission.....	18	33	1	17	33	2	22	28	21	17	18	14	7	30	32	32	32	32	3	2	1





## CASCADE COUNTY.—Continued.

PRECINCTS.	Members Legislature		Clerk Court		Sheriff.	Treas.		Clerk and Recorder		Assessor.	County Attorney		Supt. Schools	Adminis- trator.		Coroner.			
Great Falls, 1st ward.....	44	17	167	203	238	146	215	145	14	192	166	12	153	231	139	236	123	182	62
Great Falls, 2nd ward.....	21	10	105	97	114	94	113	72	9	115	80	8	91	133	70	129	70	110	25
Great Falls, 3rd ward.....	32	14	216	179	251	152	223	172	219	155	17	222	156	147	243	147	243	139	52
Great Falls, 4th ward.....	57	21	331	440	450	340	376	379	17	345	397	23	403	376	415	428	V 320	370	98
Great Falls, B. & M Smelter	7	3	18	86	26	79	33	75	3	22	75	5	28	73	28	74	23	78	16
Great Falls, Silver Smelter..	1		51	25	68	12	51	24		54	18	4	60	17	66	11	62	14	53
Great Falls, Boston Heights	6	4	40	44	49	36	41	37	4	39	41	4	43	40	47	37	46	34	37
West Great Falls ..	13	2	101	95	111	89	104	107	83	4	104	86	51	104	104	87	114	81	90
Ulm.....			6	8	9	6	7	7		6	6	1	8	6	8	6	7	8	5
Sun River ..			21	27	25	23	22	25	2	19	27		21	25	15	31	21	23	21
Mission.....	6	3	15	38	19	34	21	23	4	19	33	2	18	33	20	33	16	37	14
Hardy ..			16	13	15	14	16	13	16		16	13	16	13	16	13	14	16	13
Cascade ..	3	2	78	88	82	85	76	88	75	3	89	74	4	74	87	86	79	94	68
Adel.....			21	11	24	8	23	8	25	7	1	23	9	23		26	6	24	7
Barker ..	2	1	34	18	28	24	38	10	34	14	1	28	2	27	24	33	19	37	11
Milligan ..			9	16	12	13	10	14	14		7	17		9	16	10	14	8	16
Orr.....			10	24	10	25	11	24	13	22		16	19	12	23	10	23	13	22
Truly.....			12	19	16	17	18	14	17	12	1	15	12	4	14	12	19	14	1
Red Butte.....	9	4	24	33	37	21	28	26	26	2	31	22	5	32	25	32	39	18	24
Field ..	4	4	12	34	21	27	14	28	14	29	1	13	27	2	10	33	16	29	18
Sand Coulee.....	2	3	88	71	92	72	80	81	75	82	2	75	86	3	67	89	79	76	69
Black Butte ..	3	3	23	31	26	29	28	26	26	27	2	24	26	2	28	30	24	27	19
Evans.....	2	2	27	29	34	24	31	26	29	29		23	32	1	24	31	27	29	23
Logging Creek ..	1		15	23	13	26	16	23	13	24		11	26		23	26	12	24	11
Monarch.....	1	1	13	3	11	7	14	3	13	4		9	7	1	10	8	7	11	2
Riceville.....	2	2	23	30	30	13	24	14	5	23	15	5	22	18	27	15	4	10	26
Armington ..	1	5	23	30	28	26	24	24	3	21	32		21	35	24	31	25	7	24
West Belt ..	36	38	70	132	118	96	54	68	81	58	99	45	97	103	124	81	107	88	52
East Belt ..	67	68	73	125	141	68	62	65	93	67	71	63	119	86	132	7	121	73	62
Willow Creek.....	2	2	23	17	22	9	29	7	3	27	11	2	25		24	17	30	16	27
Cora.....			8	22	15	14	13	17	13	17	17	1	12	18	15	15	13	16	11
Kibbey.....			42	37	50	28	30	50	29	40	40		40	39	43	35	51	25	39
Davis Creek ..			8	26	14	19	15	15		13	20		15	18	18	16	15	14	2

## CASCADE COUNTY—Continued.

PRECINCTS.	Members Legislature		Clerk Court		Sheriff		Treas.		Clerk and Recorder		Assessor.		County Attorney		Supt. of Schools		Adminis- trator.		Coroner.	
Geyser..	2	1	9	22	11	20	17	14	17	13	11	19	1	11	18	14	10	20	10	3
Neihart	15	13	135	73	162	54	173	36	103	49	131	43	17	138	164	50	157	46	129	44
Stockett			100	83	103	86	98	83	93	89	80	101	44	91	93	90	98	81	94	87
Little Chicago	6	4	47	111	52	111	43	114	44	109	42	110	4	43	115	49	106	45	108	105
Snow Creek			7	23	9	1	7	2	9	1	4	4	1	4	7	7	1	8	1	5
Little Milwaukee			8	51	9	51	8	51	8	50	8	51		8	51	8	51	8	51	8
Sunnyside			3	13	10	6	10	6	10	6	3	12		11	6	8	7	8	6	7
Box Elder	4	4	24	27	37	17	26	24	26	20	19	25	7	20	29	23	28	23	19	26
Belt Park			13	14	12	12	16	8	16	8	13	8	1	14	11	15	8	15	8	13
Dry Wolf			5	12	4	13	5	12	5	12	5	12		4	13	6	11	5	12	4
Totals	349	284	2074	2474	2610	2049	2501	2069	2249	1991	2092	2187	253	2313	2401	2653	2504	1911	2175	582
Pluralities				400	561		432		258		96			72		438	593		323	

## CASCADE COUNTY—Continued.

PRECINCTS.	Surveyor.		Auditor.			County Commissioners.						
	Morton.	Fernch.	Cart.	Cummings.	Vannum.	Delphy.	Neihart.	Roalswick.	Cooper.	Beachly.	Peterson.	Dickinson.
Gt. Falls, 1st wd....	209	153	211	127	29	210	185	198	159	142	125	64
Gt. Falls, 2nd wd....	125	73	114	77	13	124	113	120	96	76	69	17
Gt. Falls, 3rd wd....	241	144	244	126	20	234	218	227	157	147	137	42
Gt. Falls, 4th wd....	70	383	385	314	57	353	333	358	385	364	349	90
Gt. F. B & M Smelt..	23	79	19	73	9	22	19	20	83	77	80	8
Gt. Falls, Sil. Smelt..	55	20	60	12	4	56	59	56	20	14	14	9
Gt. Falls, B. Hgts....	38	45	45	32	7	43	39	37	47	38	38	7
West Gt. Falls.....	105	87	110	82	4	101	97	104	86	89	87	5
Ulm.....	6	7	10	4	.....	6	7	7	7	8	7	.....
Sun River.....	21	25	20	27	.....	22	17	12	37	23	25	8
Mission.....	18	35	18	33	1	16	16	17	34	33	33	4
Hardy.....	16	13	16	13	.....	15	13	16	14	14	13	.....
Cascade.....	84	78	83	76	2	84	84	70	89	81	77	6
Adel.....	21	11	22	10	.....	22	22	24	9	9	9	1
Barker.....	39	12	36	13	.....	46	33	28	7	8	18	2
Milligan.....	8	16	10	14	.....	9	9	8	16	16	14	3
Orr.....	11	23	10	24	.....	13	11	11	20	23	23	.....
Truly.....	11	21	14	17	.....	12	7	16	16	1	15	10
Red Butte.....	29	27	33	20	3	33	26	33	21	28	16	10
Field.....	18	25	18	23	2	13	10	13	35	26	27	7
Sand Coulee.....	78	77	54	108	1	80	80	97	69	74	71	2
Black Butte.....	25	3	25	26	2	24	19	21	29	30	28	7
Evans.....	36	20	31	24	.....	31	27	32	28	31	21	1
Logging Creek.....	14	23	12	24	.....	16	14	13	22	23	23	.....
Monarch.....	10	7	14	3	1	19	8	6	1	3	2	1
Riceville.....	22	18	23	13	3	35	20	13	3	13	13	3
Armington.....	21	30	21	28	4	37	21	19	22	21	26	5
West Belt.....	100	94	55	106	45	115	63	61	132	83	87	52
East Belt.....	120	83	64	74	60	132	70	75	129	62	64	69
Willow Creek.....	29	12	9	9	2	30	28	22	14	9	9	8
Cora.....	9	20	11	16	2	11	13	10	19	17	18	5
Kibbey.....	48	31	43	34	1	60	27	27	19	30	53	1
Davis Creek.....	15	17	14	18	.....	16	16	13	15	15	19	.....
Geyser.....	16	14	10	17	1	14	10	7	15	17	23	1
Neihart.....	157	48	142	51	12	135	180	108	37	32	62	24
Stockett.....	99	83	95	117	2	98	96	102	81	80	84	5
Little Chicago.....	43	109	42	109	4	43	40	54	113	114	115	2
Snow Creek.....	8	1	7	1	.....	5	8	3	.....	.....	5	1
Little Milwaukee.....	8	51	8	50	.....	8	8	8	51	51	51	.....
Sunnyside.....	8	7	9	8	.....	10	6	7	9	6	6	4
Box Elder.....	20	29	20	28	8	41	26	92	17	21	13	5
Belt Park.....	20	29	20	28	2	41	16	8	7	8	7	1
Dry Wolf.....	6	11	5	12	.....	5	6	5	12	12	11	.....
Totals.....	2354	2100	2227	1997	294	2411	2122	2118	2162	1989	1990	490
Pluralities.....	254	.....	230	.....	.....	.....	.....	.....	.....	.....	.....	.....

Note.—A contest instituted, for a recount, between Roalswick and Neihart, resulted in the election of Roalswick.

## OFFICIAL ELECTION RETURNS FOR CHOTEAU COUNTY, FOR ELECTION HELD NOVEMBER 6, 1900.

PRECINCTS.	President.			For Congress.			Governor.			Lieut. Governor.			Secretary of State.			Attorney General.			Treasurer.			Auditor.		
	McKinley, r. ....	Bryan, d. ....	Edwards, f.-p. ....	Murray, r. ....	Kelley, i.-d. ....	Toole, f.-d. ....	Folsom, r. ....	Hogan, i.-d. ....	Higgins, f.-d. ....	Bennett, r. ....	Marion, i.-d. ....	Hays, f.-d. ....	Yoder, r. ....	Donovan, f.-p. ....	Porter, r. ....	Stewart, i.-d. ....	Barret, f.-d. ....	Edawrds, r. ....	Livingston, i.-d. ....	Calderhead, f.-p. ....	Proctor, r. ....	McLean, i.-d. ....		
Harlem .....	83	30	29	86		32	16	1	29	84	1	29	84	28	85	1	25	88		25	85	1		
Indson .....	18	8	6	14		7	18		5	15		5	13		19		6	14		5	14			
Landusky .....	26	12	12	23		13	23		12	22		14	20	15	21		12	24		12	23			
Chinook .....	174	94	97	172	1	114	170	4	98	168	4	98	167	95	167	4	93	168	5	90	163	5		
Lower Clear Creek .....	12	4	4	13		5	12		4	13		4	12	12	4		14	42		4	11			
Lloyd .....	41	13	12	44		15	41		14	40		13	42	14	42		14	42		13	42			
Cleveland .....	37	8	7	43		9	39		7	40		6	37	7	40		4	42		4	41			
Warrick .....	29	8	8	29	1	11	28		11	28		11	27	10	28	1	11	27		11	27			
Egan .....	11	4	3	8	1	6	8		4	8		3	10	1	11	1	3	9	1	2	10	1		
Havre .....	138	146	121	132	19	138	130	19	120	136	18	136	128	103	138	20	115	132	16	131	124	12		
Big Sandy .....	51	23	19	50		41	39		27	45		27	46	23	48		23	45		18	50			
Box Elder .....	23	7	7	23		10	23		8	23		7	24	4	25	1	5	25		6	24			
Chester .....	16	7	7	16		7	16		6	17		7	15	6	17		5	17		6	17			
Gold Butte .....	37	25	22	40		28	37		23	38	1	23	39	22	40		23	39		20	40			
East Butte .....	27	5	6	25		6	27		6	27		5	27	6	26		6	27		6	27			
Lucille .....	17	5	5	12		6	11		7	10		6	10	4	15		5	12		6	11			
Valleaux .....	19	8	6	15		6	19		6	18		6	13	6	14		6	14		6	15			
Perryburg .....	8	6	5	9		7	8		6	9		4	10	4	10		4	10		3	10			
Pt. Benton .....	172	118	97	162	15	132	15	11	112	162	8	122	151	94	176	8	107	165	8	94	172	7		
Marías .....	11	9	8	11		11	9		11	9		9	8	8	12		7	11		7	11			
Upper Highwood .....	26	27	24	26	1	24	29	1	23	27	2	25	26	21	27	1	25	27	1	24	27	1		
Lower Highwood .....	12	5	5	11	1	7	11		6	11	1	7	11	6	11	1	6	11	1	6	11	1		
Shonkin .....	5	16	12	4	2	13	3		14	3	1	15	3	15	3		14	3	1	13	4	1		
Flagler .....	7	6	5	7		6	7		6	7		6	7	5	7		5	7		4	8			
Phillips .....	25	5	5	26		16	15		5	26		5	25	10	21		5	25		5	25			
Libby's .....	11	3	3	10		2	7		4	8	2	4	10	3	11		5	8	1	2	10	1		
Upper Shonkin .....	13	8	9	11		6	8		9	10	3	9	9	9	11		8	11		10	10			
Circle Ranch .....	14	8	7	13	2	9	14	2	5	15	1	7	3	7	13	1	7	14	1	5	14			
Elmont .....	12		1	11			12		6	13		6	13	7	13			13			12			
Basin .....	14	5	5	14	1	6	13		6	13		6	13	7	13		5	14		5	14			
Ragland .....	9	6	4	10		5	11		5	10		5	9	4	10		5	10		5	10			
Total .....	1098	629	561	1070	47	697	1019	54	599	1053	43	621	1020	549	1084	39	563	1065	35	547	1066	31		
Pluralities .....	469			509						454			399		536			502			519			



PRECINCTS.	Superintendent of Schools.			Associate Justice Supreme Court.		Judge 10th Dist.	Members of the Legislature.						Clerk District Court.		Sheriff.	Treasurer.								
	Welch, f.-l....	Harmon, r....	Leamy, i.-d....	Milburn, f.-d....	Von Tobel, r....	Word, i.-d....	Tattan, d....	Cheadle, r....	Bourne, r....	Patterson, r....	Moran, d....	Crutcher, d..	Neubert, i.-d....	Kane, i.-d....	Bassuit, p....	Mack, p....	Boyle, r....	Todd, d....	Campbell, p..	Clary, d....	Howell, r....	Smith, d....	Lockwood, r....	Stocking, p....
Harlem	26	86	.....	30	83	1	42	74	78	83	37	28	1	1	.....	.....	88	22	1	43	74	59	60	.....
Dodson	4	15	.....	7	17	.....	17	7	10	14	11	14	6	.....	.....	.....	17	6	.....	18	8	15	11	.....
Lantasky	13	21	.....	16	20	.....	22	14	19	20	19	16	1	.....	.....	.....	20	9	.....	16	21	22	15	.....
Chinook	87	167	4	97	161	7	190	175	138	128	143	92	6	4	1	2	169	74	1	154	125	72	199	1
Lower Clear Creek	4	11	.....	4	13	.....	7	9	10	11	7	11	4	.....	.....	.....	14	2	.....	11	5	3	14	.....
Lloyd	11	42	.....	12	43	.....	13	42	42	37	16	17	.....	.....	.....	.....	48	6	.....	18	37	6	51	.....
Cleveland	5	40	.....	6	39	.....	10	36	39	40	5	3	.....	.....	.....	.....	41	4	.....	37	37	5	44	.....
Warwick	11	28	.....	13	26	.....	11	27	22	20	16	9	4	.....	.....	.....	31	5	.....	25	14	7	31	.....
Egan	2	10	1	5	7	1	9	8	10	11	4	3	2	1	.....	.....	13	1	.....	10	7	1	14	.....
Havre	119	125	16	121	128	18	102	103	127	122	118	79	18	39	12	11	138	89	7	96	194	86	164	5
Big Sandy	20	46	.....	24	45	.....	41	33	46	52	16	10	12	2	.....	.....	54	19	.....	44	36	21	59	.....
Box Elder	4	25	.....	8	23	.....	10	20	19	20	13	6	1	.....	.....	.....	28	2	.....	15	18	3	28	.....
Chester	6	16	.....	6	17	.....	8	14	17	15	7	6	.....	.....	.....	.....	17	6	.....	9	14	8	15	.....
Gold Butte	22	38	.....	23	40	.....	28	36	34	36	28	23	.....	.....	.....	2	40	19	1	28	37	16	46	1
East Butte	5	26	.....	5	12	.....	7	4	28	23	7	4	.....	.....	.....	1	27	3	.....	12	22	3	27	1
Lucille	6	11	.....	6	15	.....	9	12	13	14	4	5	4	.....	.....	.....	15	5	.....	19	3	3	18	.....
Valleaux	5	15	.....	4	10	11	7	8	9	5	3	4	7	.....	.....	.....	23	2	.....	16	9	3	23	.....
Perryburg	5	11	.....	4	10	11	7	8	9	5	3	4	7	.....	.....	.....	11	3	.....	11	4	2	13	.....
Pl. Benton	45	160	9	113	158	.....	198	93	148	110	90	98	102	8	.....	.....	201	91	.....	191	120	94	195	.....
Marías	9	10	.....	9	9	1	12	7	6	3	9	13	5	.....	.....	.....	16	1	.....	14	6	7	12	.....
Upper Highwood	24	26	1	25	26	1	32	22	25	20	21	21	10	2	1	1	41	10	.....	40	16	15	39	.....
Lower Highwood	6	11	1	6	11	.....	6	11	10	11	4	4	3	.....	.....	.....	13	1	.....	14	6	7	12	.....
Shonkin	14	3	.....	13	3	.....	18	1	1	6	14	12	6	2	.....	.....	11	8	.....	10	8	1	14	1
Shonkin	3	3	.....	3	3	.....	18	1	1	6	14	12	6	2	.....	.....	11	8	.....	10	8	1	14	1
Flagler	5	7	.....	5	7	.....	8	5	6	5	5	8	.....	.....	.....	.....	9	4	.....	18	1	8	11	.....
Phillips	5	25	.....	5	27	1	14	17	24	25	5	6	.....	.....	.....	.....	27	5	.....	7	25	5	27	.....
Libby's	2	10	1	4	8	.....	12	9	10	9	3	4	1	.....	.....	.....	12	2	.....	13	1	2	12	.....
Upper Shonkin	8	12	.....	10	9	.....	18	7	22	11	7	12	2	.....	.....	.....	20	3	.....	21	4	8	15	.....
Circle Ranch	5	13	1	6	14	1	10	13	13	13	3	3	11	1	.....	.....	15	5	.....	23	1	6	14	.....
Belmont	1	11	.....	1	11	.....	1	10	10	10	2	2	.....	.....	.....	.....	13	1	.....	13	10	.....	13	.....
Basin	4	9	6	5	14	.....	11	10	11	10	10	9	.....	.....	.....	.....	15	4	1	10	12	3	17	.....
Ragland	5	9	.....	5	10	.....	6	10	12	10	2	3	4	1	.....	.....	13	1	.....	11	6	3	13	.....
Total	538	1037	40	598	1034	42	801	816	958	905	434	513	201	61	17	16	1200	413	13	927	879	486	1255	9
Pluralities	.....	499	.....	.....	436	.....	20	.....	324	271	.....	.....	.....	.....	.....	.....	787	.....	.....	48	.....	739	.....	

## CHOTEAU COUNTY—Continued.

PRECINCTS.	Clerk, Recorder		Assessor.	Co. Atty	Supt. Schools	Administrator.		Coroner.	Surveyor.	County Commissioners.												
	Sayre, r.....	English, p.....	Maney, f.....	Sullivan, r.....	Wickizer, p.....	Pray, r.....	Flagler, i.-d.....	Flanagan, r.....	Fenton, i.-d.....	Dexter, r.....	Michaels, p.....	Hopkins, r.....	Ayars, p.....	Farnham, i.-d.....	Merrifield, r.....	Devlin, f.-d.....	Fox, f.-d.....	Williams, f.-d.....	Lewis, r.....	Resor, r.....	French, r.....	Senieur, p.....
Harlem.....	94.....	.....	26.....	83.....	.....	86.....	11.....	85.....	2.....	84.....	.....	88.....	1.....	57.....	57.....	20.....	46.....	29.....	75.....	62.....	97.....	.....
Lodson.....	18.....	.....	4.....	19.....	.....	19.....	4.....	19.....	.....	12.....	.....	18.....	.....	15.....	15.....	5.....	8.....	7.....	9.....	8.....	17.....	.....
Landusky.....	26.....	.....	11.....	23.....	.....	24.....	2.....	25.....	.....	18.....	.....	26.....	.....	21.....	203.....	7.....	25.....	11.....	22.....	12.....	30.....	2.....
Chinook.....	190.....	2.....	116.....	142.....	7.....	173.....	36.....	155.....	1.....	163.....	.....	206.....	2.....	62.....	62.....	99.....	74.....	177.....	137.....	146.....	125.....	.....
Lower Clear Creek.....	14.....	.....	7.....	10.....	.....	13.....	4.....	9.....	.....	12.....	.....	15.....	.....	5.....	11.....	8.....	1.....	2.....	8.....	13.....	11.....	.....
Lloyd.....	48.....	.....	13.....	41.....	.....	43.....	14.....	26.....	.....	41.....	.....	44.....	.....	13.....	40.....	16.....	10.....	18.....	36.....	40.....	41.....	.....
Cleveland.....	46.....	.....	13.....	35.....	.....	40.....	18.....	29.....	.....	38.....	.....	41.....	.....	41.....	41.....	5.....	6.....	20.....	42.....	33.....	35.....	.....
Warrick.....	33.....	.....	16.....	21.....	.....	27.....	15.....	16.....	.....	24.....	.....	26.....	.....	14.....	21.....	17.....	9.....	14.....	20.....	22.....	25.....	.....
Egan.....	15.....	.....	2.....	13.....	.....	13.....	4.....	12.....	.....	11.....	.....	11.....	.....	6.....	8.....	7.....	4.....	4.....	8.....	9.....	10.....	1.....
Hayre.....	154.....	12.....	96.....	151.....	6.....	149.....	32.....	166.....	23.....	111.....	6.....	133.....	9.....	114.....	119.....	207.....	93.....	146.....	71.....	75.....	124.....	18.....
Big Sandy.....	57.....	.....	23.....	42.....	1.....	49.....	25.....	42.....	.....	45.....	.....	44.....	.....	32.....	37.....	40.....	19.....	37.....	43.....	34.....	52.....	.....
Box Elder.....	28.....	.....	7.....	24.....	.....	25.....	1.....	22.....	.....	23.....	.....	23.....	.....	15.....	16.....	13.....	5.....	5.....	23.....	20.....	22.....	.....
Chester.....	17.....	.....	5.....	18.....	.....	18.....	3.....	16.....	.....	18.....	.....	18.....	.....	5.....	17.....	8.....	5.....	5.....	17.....	18.....	16.....	.....
Gold Butte.....	19.....	.....	21.....	40.....	1.....	40.....	3.....	41.....	.....	38.....	.....	39.....	1.....	22.....	38.....	23.....	24.....	23.....	42.....	40.....	38.....	1.....
East Butte.....	27.....	1.....	3.....	28.....	1.....	27.....	5.....	24.....	.....	26.....	.....	1.....	1.....	5.....	24.....	11.....	6.....	6.....	22.....	23.....	24.....	1.....
Lucille.....	15.....	.....	3.....	16.....	.....	14.....	3.....	13.....	.....	15.....	.....	15.....	.....	4.....	13.....	4.....	3.....	5.....	15.....	12.....	12.....	.....
Valleaux.....	20.....	.....	4.....	22.....	.....	20.....	7.....	15.....	.....	15.....	.....	15.....	.....	12.....	12.....	4.....	6.....	6.....	20.....	14.....	14.....	.....
Perrysburg.....	11.....	.....	2.....	13.....	.....	13.....	4.....	9.....	.....	12.....	.....	12.....	.....	106.....	146.....	151.....	76.....	112.....	194.....	114.....	143.....	41.....
Ft. Penton.....	209.....	1.....	56.....	225.....	2.....	235.....	146.....	136.....	1.....	206.....	4.....	174.....	2.....	26.....	9.....	15.....	6.....	17.....	38.....	31.....	26.....	.....
Marlas.....	16.....	.....	3.....	15.....	.....	15.....	15.....	29.....	.....	12.....	.....	32.....	.....	5.....	9.....	22.....	6.....	3.....	13.....	11.....	2.....	.....
Upper Highwood.....	39.....	.....	16.....	35.....	.....	36.....	22.....	29.....	.....	34.....	.....	32.....	.....	26.....	25.....	22.....	17.....	6.....	7.....	5.....	4.....	.....
Lower Highwood.....	12.....	1.....	6.....	10.....	1.....	11.....	2.....	12.....	.....	12.....	.....	1.....	1.....	4.....	11.....	6.....	5.....	3.....	13.....	11.....	11.....	.....
Shonkin.....	10.....	.....	8.....	12.....	.....	12.....	8.....	9.....	.....	5.....	.....	5.....	.....	14.....	3.....	14.....	11.....	9.....	7.....	5.....	4.....	.....
Flagler.....	10.....	.....	3.....	10.....	.....	11.....	6.....	7.....	.....	9.....	.....	9.....	.....	5.....	6.....	5.....	4.....	6.....	8.....	7.....	6.....	.....
Phillips.....	27.....	.....	5.....	26.....	.....	26.....	.....	26.....	.....	24.....	.....	24.....	.....	6.....	24.....	14.....	5.....	5.....	23.....	18.....	24.....	.....
Libby's.....	12.....	.....	3.....	10.....	.....	9.....	3.....	9.....	.....	10.....	.....	10.....	.....	4.....	4.....	3.....	3.....	5.....	10.....	7.....	10.....	.....
Upper Shonkin.....	17.....	.....	4.....	16.....	.....	15.....	16.....	6.....	.....	18.....	.....	15.....	.....	8.....	9.....	6.....	10.....	6.....	12.....	12.....	12.....	.....
Circle Ranch.....	16.....	.....	4.....	19.....	.....	16.....	12.....	9.....	.....	14.....	.....	12.....	.....	5.....	13.....	10.....	5.....	2.....	16.....	15.....	14.....	.....
Belmont.....	12.....	.....	.....	12.....	.....	11.....	.....	11.....	.....	11.....	.....	11.....	.....	11.....	11.....	1.....	1.....	7.....	11.....	10.....	14.....	.....
Basin.....	16.....	.....	8.....	10.....	.....	11.....	7.....	11.....	.....	12.....	.....	15.....	.....	13.....	7.....	15.....	1.....	3.....	7.....	7.....	7.....	.....
Ragland.....	14.....	.....	2.....	14.....	.....	11.....	3.....	12.....	.....	8.....	.....	11.....	.....	3.....	7.....	8.....	3.....	8.....	14.....	11.....	12.....	.....
Total.....	1242.....	36.....	490.....	1155.....	19.....	1212.....	437.....	1005.....	33.....	1079.....	13.....	1140.....	17.....	600.....	971.....	763.....	495.....	703.....	978.....	847.....	991.....	71.....
Pluralities.....	.....	.....	.....	665.....	.....	.....	.....	568.....	.....	.....	.....	1123.....	.....	.....	371.....	.....	.....	.....	215.....	84.....	228.....	.....

## OFFICIAL ELECTION RETURNS FOR CUSTER COUNTY, FOR ELECTION HELD NOVEMBER 6, 1900.

PRECINCTS.	Presi- dent.	Congress	Governor.	Lieut. Gov.	Sec'y of State	Att'y Gen.	Treas.	Auditor.	Supt. of Schools.	Asso. Just'e Sup'e. Court	Jud. Dist.	State Senator.	Me. leg.
Miles City.....	288	179	188	274	3	224	258	2	260	2	260	2	260
Hathaway.....	10	5	6	9	6	9	6	9	6	9	6	9	6
Sadie.....	11	7	8	11	8	11	8	11	8	11	8	11	8
Hermann's.....	9	8	7	7	8	8	8	8	8	8	8	8	8
Rebe.....	4	4	5	3	5	3	5	3	5	3	5	3	5
Gov't Saw Mill.....	20	5	5	20	9	16	9	16	9	16	9	16	9
Rosebud.....	25	13	14	26	14	27	14	27	14	27	14	27	14
Butte School House.....	12	3	3	12	3	12	3	12	3	12	3	12	3
Forsyth.....	109	70	69	112	1	73	111	1	69	112	1	69	112
Howard.....	9	4	5	6	1	4	8	1	4	8	1	4	8
Rancher.....	20	15	16	17	16	19	16	19	16	19	16	19	16
Blatchford.....	4	3	3	4	3	4	3	4	3	4	3	4	3
Terry.....	53	11	13	64	13	53	13	53	13	53	13	53	13
Fallon.....	7	2	3	7	2	7	2	7	2	7	2	7	2
T. D. Ranch.....	8	4	4	8	4	8	4	8	4	8	4	8	4
Laney's.....	9	4	5	8	4	6	7	4	6	7	4	6	7
O'Neill's.....	10	2	3	10	4	9	4	9	4	9	4	9	4
Knowlton.....	16	7	7	17	10	18	10	18	10	18	10	18	10
Powderville.....	10	13	9	9	13	9	13	9	13	9	13	9	13
S. H. Ranch.....	2	6	6	2	6	2	6	2	6	2	6	2	6
Buy Horse.....	10	9	10	10	12	10	10	12	10	10	12	10	10
Alzada.....	19	15	16	18	16	18	16	18	16	18	16	18	16
Brick's Ranch.....	9	29	32	7	31	8	31	8	31	8	31	8	31
School Dist. No. 14.....	6	4	5	5	5	5	5	5	5	5	5	5	5
Ekalaka.....	67	53	55	65	58	62	58	62	58	62	58	62	58
Garland.....	14	5	5	15	6	14	5	15	6	14	5	15	6
Terretts.....	11	10	10	11	10	12	10	12	10	12	10	12	10
Baringer.....	3	3	3	3	3	3	3	3	3	3	3	3	3
Ashland.....	14	6	6	14	7	13	7	13	7	13	7	13	7
Pagett's.....	14	3	5	12	5	11	5	11	5	11	5	11	5
Delway.....	5	1	1	5	1	5	1	5	1	5	1	5	1
Binney.....	14	16	16	16	16	16	16	16	16	16	16	16	16
O'Neill, d.....	239	461	199	280	3	258	2	260	2	260	2	260	2
McLean, r.....	280	15	6	9	6	9	6	9	6	9	6	9	6
Johnson, d.....	199	19	8	11	7	7	19	8	11	7	19	8	11
Loud, r.....	3	16	9	5	8	5	8	5	8	5	8	5	8
Word, i-d.....	3	4	6	2	4	6	2	4	6	2	4	6	2
Von Tobel, r.....	196	25	4	20	13	25	4	20	13	25	4	20	13
Milburn, f-d.....	2	38	15	25	22	38	15	25	22	38	15	25	22
Leamy, i-d.....	2	17	10	14	10	14	10	14	10	14	10	14	10
Harmon, r.....	280	12	3	12	4	12	3	12	4	12	3	12	4
Welsh, f-l.....	188	111	1	93	87	177	67	144	42	177	67	144	42
McLean, i-d.....	2	6	6	19	15	1	36	15	18	12	3	4	3
Proctor, r.....	278	13	7	13	7	13	7	13	7	13	7	13	7
Calderhead, f-p.....	2	13	27	13	27	13	27	13	27	13	27	13	27
Livingston, i-d.....	2	15	19	15	19	15	19	15	19	15	19	15	19
Edwards, r.....	280	3	4	3	4	3	4	3	4	3	4	3	4
Barret, f-d.....	191	13	7	13	7	13	7	13	7	13	7	13	7
Stewart, i-d.....	1	13	7	13	7	13	7	13	7	13	7	13	7
Porter, r.....	306	18	18	18	18	18	18	18	18	18	18	18	18
Donovan, f-p.....	174	6	9	6	9	6	9	6	9	6	9	6	9
Yoder, r.....	270	13	52	18	47	13	52	18	47	13	52	18	47
Hays, f-d.....	205	3	3	3	3	3	3	3	3	3	3	3	3
Marion, i-d.....	2	17	17	15	19	15	19	15	19	15	19	15	19
Bennett, r.....	260	3	4	3	4	3	4	3	4	3	4	3	4
Higgins, f-d.....	2	17	17	15	19	15	19	15	19	15	19	15	19
Hogan, i-d.....	2	17	17	15	19	15	19	15	19	15	19	15	19
Fo'som, r.....	258	13	53	13	53	13	53	13	53	13	53	13	53
Toole, f-d.....	3	13	53	13	53	13	53	13	53	13	53	13	53
Kelley, i-d.....	274	10	10	10	10	10	10	10	10	10	10	10	10
Murray, r.....	188	6	9	6	9	6	9	6	9	6	9	6	9
Edwards, f-p.....	14	27	14	27	14	27	14	27	14	27	14	27	14
Bryan, d.....	20	5	5	20	9	16	9	16	9	16	9	16	9
McKinley, r.....	288	10	5	6	9	6	9	6	9	6	9	6	9

## SEVENTH ANNUAL REPORT OF BUREAU

## CUSTER COUNTY—Continued.

	Presi- dent	Congress	Governor.	Lieut. Gov.	Sec'y of State.	Att'y Gen.	Treas.	Auditor.		Supt. of Schools.	Asso. Just'e Sup'e. Court	Jud. 7th Dist.	State Senator	Me. leg.	
PRECINCTS.	O'Neill, d.....														
	McLean, r.....														
	Johnson, d.....														
	Loud, r.....														
	Word, i.-d.....														
	Von Tobel, r.....														
	Milburn, f.-d.....														
	Leamy, i.-d.....														
	Harmon, r.....														
	Welsh, f.-l.....														
	McLean, i.-d.....														
	Proctor, r.....														
	Calderhead, f.-p.....														
	Livingston, i.-d.....														
	Edwards, r.....														
Barret, f.-d.....															
Stewart, i.-d.....															
Porter, r.....															
Donovan, f.-p.....															
Yoder, r.....															
Hays, f.-d.....															
Marion, i.-d.....															
Bennett, r.....															
Higgins, f.-d.....															
Hogan, d.-d.....															
Folsom, r.....															
Toole, f.-d.....															
Kelley, i.-d.....															
Murray, r.....															
Edwards, f.-p.....															
Bryan, d.....															
McKinley, r.....															
Decker .....	9	11	10	9	16	9	10	9	10	9	10	20	10	9	
Central School House .....	10	14	15	10	16	9	10	11	15	10	17	24	18	16	
Lame Deer.....	11	15	12	11	17	10	13	12	16	11	19	27	21	17	
Lee.....	7	12	13	10	12	10	13	11	10	11	13	24	12	11	
Smith's Ranch .....	15	2	3	15	2	3	14	2	6	3	6	9	3	5	
Pleasant Hill.....	7	2	7	2	7	2	6	2	6	3	6	9	3	5	
Daly's Ranch .....	21	20	21	1	20	21	1	20	22	20	31	42	19	20	
Kenzie.....	5	3	5	3	5	3	5	3	5	3	5	7	3	4	
Jasper Rue's Ranch .....	2	4	4	3	4	2	3	3	3	3	4	6	4	4	
Ridge School House .....	2	2	2	2	2	2	2	1	2	2	2	3	2	1	
Wayne .....	65	9	65	10	66	10	66	9	65	9	64	74	9	65	
Antelope .....															
Crow Agency .....															
Total .....	980	607	636	6	694	934	5	649	942	619	941	74	65	8	
Pluralities .....	373	373	325	240	240	240	283	283	283	283	735	7	65	685	

PRECINCTS.



## CUSTER COUNTY—Continued.

PRECINCTS	Members of the Legislature			Sheriff	Clerk of Court	T'r'surer	Clerk and Recorder	Assessor	County Attorney	Supt. of Schools	Admin-istrator	Coroner	Surveyor	County Commissioners															
	Hopkins, d..	Becker, r....	Newbury, r....	Savage, r....	Cuto, d .....	McAusland..	Beeman .....	McKay, r....	Schwartz, d....	Swerdfier, r....	Deckert, d....	Crosby, r .....	Burgess, d....	Johnston, r .....	Sanner, d....	Smith, r. ....	Zook, d....	Twombly, r....	Smith, d..	Bateman, r....	Newman, d....	Flynn, r....	Scheetz, d....	Maples, r .....	Stith, r....	Bull, r....	Wear, d....	Mendenhall, d....	Gibb, d..
Miles City....	211	231	161	283	216	326	161	272	218	236	228	277	214	279	204	216	279	275	135	278	202	221	211	284	244	278	240	155	270
Hathaway....	6	8	9	9	6	9	6	9	5	7	8	8	7	9	7	8	7	7	6	7	6	6	10	8	10	9	8	7	5
Stadie .....	8	11	10	8	12	14	5	11	8	13	6	9	10	9	10	12	9	10	9	12	7	10	8	9	10	9	10	6	7
Hermann's .....	7	6	7	14	3	11	5	11	3	15	2	6	11	7	8	3	14	8	6	9	9	5	9	10	7	14	7	4	8
Reebe .....	5	3	4	5	3	4	3	3	5	2	3	3	5	3	3	4	3	3	5	4	4	4	1	6	3	2	5	4	4
Gov't Saw Mill .....	5	15	17	19	6	18	6	17	8	17	8	21	4	17	8	15	10	1	6	17	17	13	12	18	15	12	12	6	11
Rosebud....	18	11	22	21	21	32	8	18	23	28	11	11	17	29	12	16	22	27	11	31	10	21	21	20	16	26	19	15	14
Butte School House..	7	11	9	12	3	12	3	11	3	12	3	10	3	11	4	7	8	12	3	11	3	9	6	7	10	11	4	6	3
Forsyth .....	106	138	67	88	104	114	67	95	89	121	58	117	70	115	71	95	92	108	68	113	65	108	78	107	101	95	63	84	69
Howard .....	6	10	7	7	6	6	6	8	4	9	3	3	4	8	4	6	6	6	7	7	6	6	6	9	9	8	4	6	2
Rancher .....	17	22	14	13	23	22	12	21	13	20	14	18	17	19	15	10	25	18	15	18	16	18	17	16	18	18	17	16	16
Blatchford .....	3	4	3	3	4	5	2	3	5	2	3	4	4	5	2	2	5	4	3	4	3	4	3	2	5	5	3	5	3
Terry .....	21	46	41	27	38	53	13	39	17	62	13	53	13	52	15	25	42	48	16	50	15	47	19	22	65	23	8	11	2
Fallon .....	3	7	7	4	6	7	3	6	3	7	3	8	2	7	3	5	4	7	3	7	3	5	5	4	8	6	4	4	2
T. D. Ranch .....	3	9	10	6	6	10	2	7	5	8	4	4	6	8	4	1	11	8	4	10	2	2	10	7	8	7	5	4	2
Laney's.....	3	9	10	6	7	9	4	9	4	10	4	9	11	7	5	4	9	7	6	10	3	6	7	6	9	10	4	4	4
O'Neill's .....	3	3	7	12	1	11	2	9	4	9	4	4	2	11	7	6	7	6	10	10	3	9	4	9	10	8	5	2	3
Knowlton.....	9	14	13	15	11	17	17	12	13	14	10	16	9	16	7	9	17	16	8	14	10	7	15	15	17	12	9	6	4
Powderville .....	12	8	9	8	16	12	11	9	13	9	12	5	19	11	13	6	18	9	4	9	14	4	18	6	8	7	16	13	13
S. H. Ranch .....	6	2	2	7	2	5	4	1	1	7	2	1	7	2	6	2	7	1	8	2	6	6	9	3	2	2	5	5	5
Bay Horse .....	10	9	10	10	12	14	5	9	11	14	6	8	13	8	12	4	17	9	10	8	11	4	15	10	8	13	7	11	10
Alzada .....	14	18	19	19	15	22	12	20	14	20	14	23	11	18	16	27	7	18	15	25	9	20	14	20	18	20	15	14	14
Brick's Ranch .....	26	4	13	21	17	11	28	8	3	11	28	12	26	8	31	10	28	7	31	8	31	6	33	7	8	9	33	29	30
School Dist. No. 14 .....	5	5	5	8	3	7	3	10	...	8	3	8	2	6	3	10	1	5	4	5	5	3	8	8	6	4	8	2	2
Ekalaka .....	50	59	70	52	74	73	49	67	62	72	47	50	71	57	63	65	57	63	55	63	54	52	68	58	60	61	75	49	53
Garland .....	7	11	13	12	13	15	3	12	6	14	5	7	13	10	10	2	18	12	6	13	4	7	12	15	12	17	5	2	6
Terrets .....	10	9	11	10	12	13	10	12	10	12	9	6	15	10	11	5	17	11	10	9	12	3	17	11	10	11	11	10	10
Faringer .....	...	2	3	2	1	3	...	3	...	3	...	...	3	1	2	1	2	1	3	3	...	2	1	3	3	3	3	...	...
Ashland....	4	10	13	10	8	14	5	12	8	11	7	12	6	12	5	4	16	10	6	9	9	4	15	10	12	16	7	6	5
Pagett's.....	4	12	11	9	10	16	...	13	5	15	2	7	11	12	6	8	11	10	5	11	6	8	10	11	10	17	4	2	2
DuWay.....	1	5	3	5	1	5	1	3	3	5	1	4	2	4	2	1	5	...	...	5	1	3	3	5	4	1	1	1	1
Erney .....	6	8	20	16	16	17	14	17	14	17	16	17	14	12	19	3	29	16	15	16	14	13	19	14	9	25	16	19	8

CUSTER COUNTY—Continued.

PRECINCTS	Members of the Legislature			Sheriff	Clerk of Court	Treasurer	Clerk and Recorder	Assessor	County Attorney	Supt. of Schools	Admin-istrator	Coroner	Surveyor	County Commissioners																	
	Hopkins, d.	Becker, r.	Newbury, r.	Savage, r.	Cuto, d	McAusland.	Beeman	McKay, r.	Schwartz, d.	Swerdflier, r.	Deckert, d.	Crosby, r	Burgess, d.	Johnston, r	Sanner, d.	Smith, r.	Zook, d.	Twombley, r.	Smith, d.	Bateman, r.	Newman, d.	Flynn, r.	Scheetz, d.	Maples, r	Stith, r.	Bull, r.	Wear, d.	Mendenhall, d.	Gibb, d.		
D. cker	9	11	9	11	9	10	10	12	8	12	8	12	9	11	9	10	10	6	14	10	11	9	10	10	10	9	9	9	9	9	
Central School House	18	8	6	8	17	11	13	12	13	13	12	10	5	13	8	16	6	20	10	15	12	13	9	17	8	6	7	17	19	16	
Lame Deer.	21	9	8	10	17	13	14	11	16	14	13	14	13	9	18	3	24	8	18	11	16	5	22	9	8	18	19	16	16		
Lee.	11	10	10	9	15	13	10	11	13	11	11	14	10	6	17	5	20	12	10	10	11	12	6	19	9	10	13	10	11		
Smith's Ranch	2	5	5	5	3	5	3	6	2	5	3	4	4	4	6	2	2	7	4	3	4	4	4	5	3	5	5	3	2	2	
Pleasant Hill.	11	10	7	13	6	13	3	11	6	13	4	15	2	15	1	5	13	13	4	14	14	2	10	8	12	11	15	3	2	2	
Daly's Ranch	24	14	18	13	29	28	14	17	24	21	17	23	13	28	13	10	31	22	18	22	22	18	10	9	17	17	29	20	19	17	
Kenzie.	3	5	4	3	5	5	3	4	4	4	4	5	3	5	3	4	4	4	5	3	3	5	1	7	6	3	5	5	3	3	
Jasper Rue's Ranch	3	3	1	3	4	3	4	1	6	1	3	5	2	2	2	4	4	3	2	4	3	3	3	7	3	2	2	3	3	3	
Ridge School House																															
Wayne	4	3		1	3	2	1	2	1	2	1	4		2	1	2	2	2	1	2	2	1	4	1	1	4	2	2	2	2	
Antelope																															
Crow Agency	8	66	66	64	10	65	9	65	9	65	9	65	9	65	9	65	10	65	9	65	65	65	65	65	65	65	65	65	65	9	9
Total	710	864	854	881	789	1074	545	894	735	989	621	920	714	921	635	701	951	925	644	955	640	870	885	885	885	885	885	885	885	885	642
Pluralities		179	144	92		529		159		368		206		226		250	281			315		121	146	126	134						

OFFICIAL ELECTION RETURNS FOR DAWSON COUNTY, FOR ELECTION HELD NOVEMBER 6, 1900.

Precinct.	Congress.		Governor.	Lieut. Gov.	Sec'y of State	Att'y. Gen.	Treas.	Auditor.	Supt. Schools.	Assoc. Justice Sup. Court	Jud. 7th Dis.	State Senator	Member Legislature													
	President.	Congress.	Governor.	Lieut. Gov.	Sec'y of State	Att'y. Gen.	Treas.	Auditor.	Supt. Schools.	Assoc. Justice Sup. Court	Jud. 7th Dis.	State Senator	Member Legislature													
McKinley, r....	277	237	248	2	257	482	253	503	3	252	482	5	251	491	2	206	495	1	259	487	5	754	404	380	327	436
Bryan, d..	29	7	3	23	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30
Edwards, f-p....	20	7	3	23	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30
Murray, r....	20	7	3	23	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30
Kelley, i-d....	20	7	3	23	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30
Toole, f-d....	20	7	3	23	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30
Folsom, r....	20	7	3	23	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30
Higgins, f-d....	20	7	3	23	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30
Bennet, r....	20	7	3	23	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30
Marion, i-d....	20	7	3	23	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30
Hays, f-d....	20	7	3	23	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30
Yoder, r....	20	7	3	23	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30
Donovan, f-p....	20	7	3	23	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30
Porter, r....	20	7	3	23	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30
Stewart, i-d....	20	7	3	23	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30
Barret, f-d....	20	7	3	23	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30
Edwards, r....	20	7	3	23	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30
Livingston, i-d	20	7	3	23	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30
Calderhead, f-p	20	7	3	23	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30
Proctor, r....	20	7	3	23	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30
McLean, i-d....	20	7	3	23	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30
Welch, f-l.....	20	7	3	23	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30
Harmon, r....	20	7	3	23	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30
Leamy, i-d....	20	7	3	23	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30
Milburn, f-d....	20	7	3	23	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30
Von Tobel, r....	20	7	3	23	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30
Word, i-d....	20	7	3	23	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30
Loud, r....	20	7	3	23	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30
Cullen, d....	20	7	3	23	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30
Lindsay, r....	20	7	3	23	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30
Thurston, d....	20	7	3	23	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30
McCone, r....	20	7	3	23	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30	2	30







## DEER LODGE COUNTY—Continued.

	President.	Congress.	Governor.	Lieut. Governor.	Sec'y of State.	Att'y. Gen.	Treas.	Auditor.	Supt. Schools.	Associate Just. Supreme Court.
PRECINCTS.										
Clearwater .....	1	6	20	9	6	10	18	11	6	6
Coloma .....	13	22	10	2	19	11	11	1	2	18
Copper Chif. ....	1	3	4	1	1	1	1	1	1	10
Washoe .....	9	26	8	9	4	1	3	1	1	1
Storm Lake .....	4	5	3	2	27	8	7	9	21	8
Total .....	1636	3395	1585	1557	1489	1655	1487	1609	1601	1542
Pluralities .....	1759	1558	1522	1556	1580	1635	1610	1609	1485	1554
									39	98

	Judge 3d Judicial District	State Senator	Members of the Legislature	Clerk Dist. Court	Sheriff
PRECINCTS.					
Anaconda, 1. ....	30	149	183	49	48
Anaconda, 2. ....	42	169	156	59	63
Anaconda, 3. ....	47	162	160	79	73
Anaconda, 4. ....	102	166	189	148	130
Anaconda, 5. ....	15	67	62	32	34
Anaconda, 6. ....	73	128	245	107	113
Anaconda, 7. ....	37	86	94	68	60
Anaconda, 8. ....	74	139	213	101	90
Owens, f.-l. ....					
French, r. ....					
Conley, i.-d. ....					
Flynn, f.-l. ....					
Thomas, r. ....					
Burke, i.-d. ....					
Spencer, f.-l. ....					
Gerdtts, f.-l. ....					
O'Leary, f.-l. ....					
Schwend, f.-l. ....					
McGowan, f.-l. ....					
Dillon, f.-l. ....					
Jackways, r. ....					
Williams, r. ....					
Bielenberg, r. ....					
Fitzpatrick, r. ....					
Allen, r. ....					
English, r. ....					
McDonnell, i.-d. ....					
Geary, i.-d. ....					
Boylan, i.-d. ....					
Madden, i.-d. ....					
McTague, i.-d. ....					
Toole, i.-d. ....					
Matts, i.-d. ....					
Davidson, r. ....					
Kennedy, f.-l. ....					
Napton, i.-d. ....					
Winston, r. ....					
Scharnikow, f.-d. ....					

## DEER LODGE COUNTY—Continued.

PRECINCTS	Judge 3d Judi- cial District			State Senator		Members of the Legislature										Clerk Dist. Court		Sheriff		
	Judge 3d Judi- cial District			State Senator		Members of the Legislature										Clerk Dist. Court				
Seharnikow, f.-d..	63	116	143	125	87	122	123	130	135	122	122	123	130	135	122	122	123	130	Owens, f.-l.....	108
Carroll.....	20	30	180	47	20	171	170	176	180	176	176	170	176	180	176	176	170	176	French, r.....	115
Stuart ..	21	10	6	24	9	4	4	5	5	5	5	4	5	5	5	5	4	5	Conley, i.-d....	133
Lost Creek..	10	17	18	25	11	8	10	8	10	8	8	10	8	10	8	8	10	8	Flynn, f.-l....	17
Silver Lake ..	5	6	7	10	4	3	4	5	5	3	3	4	5	5	3	3	4	5	Thomas, r.....	12
Cable.....	2	5	4	5	2	3	2	2	2	2	2	2	2	2	2	2	2	2	Burke, f.-l....	16
Blue Eyed Nellie ..	26	29	15	43	13	17	16	21	22	21	21	16	21	22	21	21	16	21	Spencer, f.-l....	10
Mill Creek ..	8	33	21	17	28	19	21	12	14	16	16	13	18	29	36	30	31	30	Gerdts, f.-l....	9
Warm Springs ..	6	16	17	8	13	17	17	15	18	16	16	16	16	16	16	16	16	16	O'Leary, f.-l .....	3
Race Track ..	32	38	16	40	32	33	33	34	37	28	32	33	34	37	28	32	33	34	Schwend, f.-l....	33
Deer Lodge, South ..	105	60	45	120	57	40	39	64	37	28	32	33	34	37	28	32	33	34	McGowan, f.-l....	92
Deer Lodge, North ..	61	30	24	69	32	14	12	19	15	10	6	8	40	32	26	85	15	47	Dillon, f.-l....	95
Pioneer.....	30	11	13	28	12	7	8	12	9	8	9	14	12	12	13	16	12	14	Jackways, r.....	95
Garrison ..	17	12	5	17	13	4	4	7	5	5	5	10	11	10	12	13	12	13	Williams, r.....	100
Gold Creek....	28	15	33	37	11	29	35	32	33	31	33	32	10	11	10	12	13	12	Bielenberg, r....	99
Avon.....	23	50	8	30	44	8	19	8	7	8	7	6	43	48	45	52	43	46	Fitzpatrick, r....	103
Washington Gulch ..	10	23	12	10	23	10	14	15	13	14	14	13	23	22	22	23	22	23	Allen, r.....	100
Blossburg.....	7	4	10	5	4	6	6	7	7	7	7	7	47	54	53	51	52	53	English, r.....	104
Elliston ..	44	54	19	48	53	12	15	16	17	18	20	17	57	54	53	51	52	53	McDonnell, i.-d....	150
Blackfoot City ..	3	10	17	8	11	12	8	13	10	10	12	11	11	11	11	11	11	11	Geary, i.-d....	128
Sunset ..	8	.....	2	8	1	2	2	2	2	2	2	2	2	2	2	2	2	2	Boylan, i.-d....	122
Ovando ..	5	40	12	5	41	8	9	8	9	8	16	8	39	40	42	42	40	4	Madden, i.-d....	135
Helmville ..	37	36	46	42	34	30	39	44	35	36	69	43	30	28	28	27	29	24	McTague, i.-d....	130
Woodworth ..	5	14	15	6	15	12	12	12	12	13	15	12	16	14	16	14	13	18	Toole, i.-d....	123
Zosel.....	32	8	5	37	5	3	3	3	3	3	3	3	7	8	8	11	12	8	Matts, i.-d....	122
Clearwater ..	1	1	6	2	5	4	5	4	5	5	5	2	8	9	10	13	12	12	Davidson, r....	87
Coloma ..	17	7	8	19	9	2	5	4	5	4	2	2	8	9	10	13	12	12	Kennedy, i.-d....	125
Copper Cliff ..	3	1	1	3	.....	2	2	1	1	1	1	1	24	8	8	8	8	1	Napton, i.-d....	143
Washoe.....	2	9	24	2	8	25	26	23	23	23	23	24	8	8	8	8	8	1	Winston, r.....	116
Storm Lake ..	.....	4	5	1	4	4	5	5	5	5	4	4	4	4	4	4	4	4	Seharnikow, f.-d..	63
Total ..	1051	1745	2107	1846	1332	1801	1859	1930	1999	1729	1936	1966	1573	1548	1587	1772	1622	1499	Pluralities	1152
Pluralities ..	.....	362	46	.....	.....	.....	130	201	270	.....	297	237	.....	.....	.....	43	.....	.....	.....	



DEER LODGE COUNTY—Continued.

PRECINCTS	Treasurer	Clerk & Recorder	Assessor	County Attorney	Superintendent of Schools	Administrator	Coroner	Surveyor	County Commissioners															
									Turner, i.-d....	Geary, i.-d....	Kelliher, i.-d....	Hoffman, r....	Barnden, r....	Miller, r....	Walker, f.-l....	Schwend, f.-l....								
Anaconda, 1.....	227	147	155	205	167	207	140	190	140	32	186	147	24	177	109	205	142	126	144	57	38	49	62	101
Anaconda, 2.....	195	183	197	174	297	174	195	168	167	147	51	14	1	150	132	185	174	152	184	61	49	62	101	129
Anaconda, 3.....	209	154	150	203	139	151	208	141	151	138	70	142	15	131	130	184	152	128	166	76	62	101	129	153
Anaconda, 4.....	301	182	188	291	132	236	302	145	151	138	142	105	17	200	192	390	154	143	153	129	101	129	153	153
Anaconda, 5.....	79	67	74	70	61	72	77	64	60	64	17	60	64	56	52	72	67	55	68	35	22	101	129	153
Anaconda, 6.....	327	128	131	339	121	258	327	122	273	119	72	248	131	90	243	331	128	112	124	85	51	81	141	164
Anaconda, 7.....	136	103	104	125	96	83	126	92	97	85	47	83	94	40	90	132	89	79	89	47	37	81	141	164
Anaconda, 8.....	274	137	140	282	126	210	280	131	218	136	72	136	39	72	210	293	129	118	132	88	79	81	141	164
Anaconda, 9.....	216	113	124	206	118	129	196	124	141	109	77	123	119	80	140	131	108	100	104	88	79	81	141	164
Carroll.....	195	36	37	207	34	176	211	25	185	32	17	178	32	18	171	108	29	25	30	25	24	25	24	25
Stuart.....	27	9	11	24	30	14	22	26	8	6	9	28	9	8	6	23	14	8	14	16	14	16	14	16
Lost Creek.....	24	20	19	23	15	18	27	15	19	9	16	12	10	13	9	13	20	20	12	11	16	14	16	14
Silver Lake.....	11	8	8	9	7	9	7	9	6	5	6	5	9	1	3	9	6	5	7	8	6	6	6	6
Cable.....	5	6	5	4	4	7	8	2	3	2	4	3	5	2	4	2	5	6	2	5	7	8	6	6
Blue Eyed Nellie.....	51	29	24	52	24	23	54	54	20	20	33	34	23	18	17	43	26	23	37	3	30	30	30	30
Mill Creek.....	35	29	36	29	42	14	25	32	22	31	11	17	34	9	15	28	31	22	18	6	3	30	30	30
Warm Springs.....	17	21	20	18	16	19	18	24	15	15	7	18	17	3	15	16	23	21	18	6	3	30	30	30
Race Track.....	38	59	47	39	31	36	50	36	19	38	28	37	37	27	27	28	18	31	42	33	40	2	25	25
Deer Lodge, South.....	68	144	37	81	67	97	147	60	42	8	68	55	75	37	37	84	77	148	70	78	2	49	49	49
Deer Lodge, North.....	30	84	83	32	50	42	80	33	22	51	30	21	50	38	40	34	30	91	44	36	52	31	31	31
Pioneer.....	29	27	23	26	14	13	31	27	20	12	14	21	14	15	11	31	32	15	17	18	18	18	18	
Garrison.....	15	19	16	16	12	10	16	15	19	14	6	13	15	7	6	16	15	15	13	15	13	13	13	13
Gold Creek.....	57	17	21	54	13	36	19	14	6	13	15	7	13	14	6	16	15	15	13	15	13	13	13	13
Avon.....	23	58	55	24	44	16	64	40	33	12	28	29	15	29	34	30	57	14	13	13	29	29	29	29
Washington Gulch.....	18	29	24	22	24	16	37	42	7	52	17	13	47	18	13	4	6	57	71	46	12	10	10	10
Blossburg.....	10	5	5	10	4	3	19	25	13	24	5	14	21	5	17	14	18	25	25	25	5	5	5	5
Elliston.....	50	66	57	58	50	29	61	9	9	4	2	9	4	2	9	9	46	53	72	56	33	33	33	33
Blackfoot City.....	12	17	12	16	11	15	10	7	13	11	2	11	11	5	21	13	11	13	19	8	6	6	6	6
Sunset.....	11	....	....	....	....	....	18	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Ovando.....	11	45	42	13	36	17	15	13	39	2	15	39	2	1	10	13	44	33	41	2	2	2	2	2
Helmville.....	71	45	37	72	27	61	68	42	40	34	27	50	31	6	38	62	27	31	31	31	25	25	25	25
Woodworth.....	16	19	16	19	16	14	19	15	16	5	12	15	12	6	20	13	17	14	13	13	5	5	5	5
Zosel.....	18	24	32	13	16	10	24	34	9	3	12	27	6	16	4	6	17	34	22	23	9	9	9	9
Clearwater.....	6	....	....	....	....	....	6	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
C 1-r.....	19	13	15	17	9	5	20	10	2	9	16	8	9	1	5	19	11	10	10	16	16	16	16	16



## DEER LODGE COUNTY—Continued.

PRECINCTS	Treasurer		Clerk & Recorder	Assessor	County Attorney	Superintendent of Schools	Administrator	Coroner	Surveyor	County Commissioners					
Schwend, f.-l..															
Walker, f.-l..															
Miller, r....															
Barnden, r....															
Hoffman, r....															
Kelliher, i.-d...															
Turner, i.-d...															
Geary, i.-d....															
Mitchell, f.-l..															
McDonald, r....															
Pinegar, i.-d...															
Faunt, f.-l....															
Short, r....															
Hughes, i.-d...															
Brollin, r....															
Ballerton, d...															
McLaughlin....															
Thompson, f.-l.															
Sawyer, r....															
Duffy, i.-d....															
Simpson....															
Flanagan, f.-l.															
Miller, i.-d....															
Staton, r....															
German, i.-d...															
Evans, r.....															
Coleman, r....															
Twohy, r....															
Copper Cliff.....	4	1	1	4	2	3	3	2	3	3	2	3	3	3	3
Washoe.....	29	8	9	26	11	22	1	24	9	23	9	1	22	22	23
Storm Lake .....	5	4	4	4	2	6	5	5	4	5	4	5	4	3	1
Total .....	2859	2048	2064	2820	1679	2286	937	1077	2240	1633	607	2133	2914	3044	1672
Pluralties .....	811			756	607					158		463	1372	1883	1823

## OFFICIAL ELECTION RETURNS FOR FERGUS COUNTY, ELECTION HELD NOVEMBER 6, 1900.

PRECINCTS	Presi- dent	Congress	Governor		Lieutenant Governor	Sec'y of State	Att'y General	Treasurer	Auditor	Superintendent of Schools	Assoc Justice Supreme C't	J'ge 10th Dist. C't	Members of Legislature		
Stanford..... Wareham..... Philbrook..... Utica..... Ubet..... Trout Creek..... Lower Cottonwood..... Upper Cottonwood..... Ross' Fork..... West Lewistown .. East Lewistown ..	71	44	48	66	1	45	67	45	43	67	55	52	66	58	50
	24	49	16	50	9	25	28	9	25	24	10	24	26	22	9
	54	12	51	51	15	51	36	15	14	51	83	99	96	94	81
	109	78	75	106	78	105	106	77	104	107	73	104	96	94	81
	74	28	30	72	31	71	32	69	1	73	83	99	71	64	37
	35	26	26	34	26	34	26	34	32	70	26	34	35	35	25
	44	55	58	46	60	46	57	47	59	46	27	33	36	36	27
	25	15	16	24	17	24	16	24	25	34	36	34	35	35	25
	20	12	12	19	11	21	12	20	15	24	49	63	39	39	45
	182	140	138	172	142	172	135	172	132	180	14	18	20	20	22
	91	87	88	88	91	90	85	1	86	88	14	15	14	15	17
	83	77	78	78	83	90	1	89	86	87	132	161	145	157	110
	88	77	78	78	83	90	1	89	86	87	132	161	145	157	110
	88	77	78	78	83	90	1	89	86	87	132	161	145	157	110



## FERGUS COUNTY—Continued.

PRECINCTS.	Memb'r Legls.	Clerk Dist. Court	Sheriff	Treas'r Recor'r	Assessor	County Attorney	Supt. of Schools	Admin'r	Coroner	Surveyor	County Commissioners	
											Westfall, d. ....	Harding, d. ....
Stanford, ....	49	72	41	57	65	41	61	70	46	60	55	51
Warcham, ....	9	25	9	22	25	69	8	41	7	25	24	46
Philbrook, ....	10	48	18	44	43	18	24	8	15	47	24	25
Utica, ....	81	114	68	20	53	48	18	21	51	18	47	50
Ubet, ....	32	77	28	71	71	114	67	101	108	107	97	104
Trout Creek, ....	24	33	27	35	72	34	39	66	72	74	66	70
Lower Cottonwood, ....	56	51	55	44	31	27	34	26	34	30	31	33
Upper Cottonwood, ....	21	26	15	64	20	46	61	45	42	66	41	43
Ross' Fork, ....	10	19	13	19	31	24	18	23	23	15	24	23
West Lewistown, ....	161	194	137	258	180	178	145	157	139	175	142	162
East Lewistown, ....	96	95	82	78	88	83	93	86	81	94	79	75
East Fork, ....	10	14	10	12	17	15	10	15	14	16	11	10
Deerfield, ....	6	23	9	25	21	24	8	26	8	15	19	25
Maiden, ....	71	46	60	38	62	59	32	34	33	28	30	27
Moccasin, ....	13	16	14	7	14	7	13	6	13	5	6	7
Moccasin City, ....	17	22	10	16	6	14	17	12	6	15	19	13
Grass Range, ....	21	39	15	22	20	18	15	21	11	11	19	19
Forest Grove, ....	10	36	6	38	35	18	17	19	36	21	32	35
Stuart, ....	12	24	12	15	35	18	30	35	19	34	31	30
Box Elder, ....	17	31	14	20	22	16	20	24	17	23	14	14
Alder Grove, ....	....	6	2	26	18	13	17	26	18	25	17	29
Judith, ....	3	16	4	8	6	5	4	1	7	2	6	8
Gilt Edge, ....	163	108	142	87	91	152	157	98	158	95	100	151









## OFFICIAL ELECTION RETURNS FOR GALLATIN COUNTY, FOR ELECTION HELD NOVEMBER 6, 1900.

PRECINCTS.	President			Congress		Governor		Lieut. Governor		Sec. of State		Att'y Gen'l		Treasurer		Auditor		Supt. of Schools		Assoc. Justice Supreme C't		
East Bozeman.....	175	219	184	174	29	194	169	181	173	29	213	171	179	171	36	173	170	27	175	176	27	
South Bozeman.....	176	149	135	170	21	141	165	23	172	20	160	161	130	160	36	136	160	16	132	170	19	
West Bozeman.....	184	187	162	188	28	175	183	164	188	27	201	178	154	176	55	175	168	30	167	177	25	
Baker.....	17	14	11	18	2	14	17	11	17	13	13	17	11	17	3	10	17	4	13	17	1	
Belgrade.....	55	98	85	58	14	91	52	16	55	15	99	53	82	56	16	79	55	16	83	53	15	
Bridger.....	41	17	19	39	18	40	19	38	38	27	17	39	17	39	1	16	40	1	17	39	1	
Chestnut.....	35	84	49	35	27	48	27	21	35	26	68	35	43	38	27	41	35	30	45	36	27	
Connell.....	31	21	19	35	27	24	31	23	31	31	23	32	19	33	14	20	33	13	51	32	14	
Flathead.....	35	66	49	32	16	63	33	15	32	14	66	31	51	33	14	50	33	8	25	47	5	
Gallatin.....	47	32	30	44	6	44	38	16	40	6	29	47	25	49	6	22	49	2	38	15	3	
Hillsdale.....	15	41	37	14	4	38	16	3	15	3	40	15	30	16	3	37	15	2	19	16	2	
Madison.....	16	21	22	13	4	20	17	3	21	3	21	16	18	17	2	19	17	2	19	16	2	
Middle Creek.....	19	26	19	20	7	21	19	6	26	6	26	18	16	19	4	20	19	4	19	19	6	
Monforton.....	42	32	32	30	7	33	38	3	31	41	33	41	31	41	2	31	41	1	31	41	1	
Manhattan.....	63	35	31	64	1	38	61	2	62	2	28	38	61	38	61	1	36	62	1	36	62	1
Roose Creek.....	16	29	26	16	1	30	14	1	16	1	28	16	26	16	1	27	16	1	27	16	1	
Salesville.....	59	76	74	56	3	76	55	1	55	2	77	57	74	54	1	75	56	2	72	54	2	
Spanish Creek.....	8	17	19	6	1	18	8	1	16	7	16	7	14	9	2	16	7	7	17	9	1	
Spring Hill.....	31	25	16	33	3	24	29	3	33	3	23	33	29	33	3	20	33	2	20	33	3	
Three Forks.....	5	23	20	4	4	19	5	3	4	4	23	4	19	4	3	19	4	4	19	4	4	
West Gallatin.....	52	31	28	48	2	30	49	1	49	1	31	47	28	49	4	28	48	3	29	48	2	
Willow Creek.....	25	54	50	26	2	51	23	5	24	4	51	26	50	27	2	51	25	4	50	27	1	
Total ..	1146	1297	1117	1132	176	1207	1096	179	1127	167	1296	1105	1078	1118	230	1103	1104	172	1106	1123	159	
Pluralities.....	.....	151	.....	15	.....	105	.....	6	.....	.....	191	.....	40	.....	40	.....	1	.....	402	.....	71	





## GALLATIN COUNTY—Continued.

PRECINCTS	County Attorney		Superintendent of Schools		Administrator		Surveyor		Coroner		County Commissioners					
	Luce, r.....	Pease, r.....	Chrisman, d.....	Ferris, r.....	Martin, d.....	Pietsch, r.....	Thorpe, d.....	Finlay, d.....	Safley, r.....	Sawyer, d.....	McDonnell, d.....	Truman, d.....	Davis, r.....	Kirk, r.....	Lambert, r.....	
East Bozeman.....	188	197	212	185	193	178	233	196	169	206	198	172	190	175	181	
South Bozeman.....	152	172	149	185	166	148	188	152	147	156	143	137	190	163	165	
West Bozeman.....	108	199	217	169	204	156	230	202	143	197	194	170	206	174	172	
Rucker.....	14	17	16	15	15	15	17	14	15	18	13	11	16	151	20	
Belgrade.....	83	59	104	55	88	54	119	82	54	98	84	87	67	67	55	
Bridger.....	24	35	15	44	19	39	20	11	43	13	15	11	47	43	45	
Chestnut.....	46	51	35	79	44	43	69	52	34	60	58	35	49	50	46	
Connell.....	26	28	17	38	23	30	28	18	29	14	11	10	39	43	38	
Feathad.....	53	38	63	33	51	32	61	52	33	65	55	41	32	36	53	
Gallatin.....	21	56	23	57	25	48	36	25	48	53	31	21	43	46	25	
Hillsdale.....	31	18	41	15	34	16	39	35	15	41	33	35	14	18	23	
Madison.....	17	21	26	14	20	17	30	18	17	31	20	20	19	16	9	
Middle Creek.....	16	27	26	20	21	19	29	22	21	27	19	19	19	24	23	
Monforton.....	32	41	37	37	33	37	41	36	32	32	33	27	42	40	34	
Manhattan.....	29	70	49	64	38	61	51	35	62	37	39	34	64	65	62	
Reese Creek.....	26	18	25	19	25	15	30	25	17	28	28	25	16	15	20	
Salesville.....	73	69	71	68	74	52	83	15	57	77	77	61	58	64	55	
Spanish Creek.....	13	13	18	9	17	8	19	15	10	17	13	11	9	17	14	
Spring Hill.....	16	40	24	32	24	30	35	19	33	20	20	35	23	23	27	
Three Forks.....	18	6	21	7	18	7	22	20	8	24	21	19	7	4	1	
West Gallatin.....	31	46	33	47	25	50	23	23	3	51	28	21	51	67	45	
Willow Creek.....	48	30	56	24	52	25	57	51	25	51	49	50	31	25	27	
Total.....	1125	1240	1278	1266	1209	1080	1470	1173	1038	1289	1188	1652	1244	1191	1100	
Pluralities.....		115	72		129			115		101			56	3		



## GRANTTE COUNTY—Continued.

GRANITE COUNTY—Continued.																																
Members Legislature				Sheriff	Clerk and Recorder	Co. Treas.	Co. Assessor	Clerk Court	Co. Att'y	Supt Schools	County Sur- vivor	Public Admin- istrator	Coroner																			
Phillsburg North	51	74	79	13	61	30	118	58	66	77	34	93	66	69	38	95	45	74	76	51	93	44	65	85	58	85	52	93				
Phillsburg South	51	70	108	194	19	95	173	98	51	119	61	91	103	101	32	133	75	71	100	75	76	100	43	140	68	43	147	53	131			
Combination	3	2	3	4	5	4	2	1	3	2	5	6	...	...	2	8	1	1	3	3	3	1	2	1	9	1	2	5	17			
Quigley	8	8	1	1	12	4	1	6	2	2	5	13	...	...	2	8	1	2	9	9	8	9	1	9	1	9	1	12	6	11		
Rock Creek	6	5	17	14	1	19	2	17	11	9	8	12	15	6	27	6	12	16	16	18	10	16	21	10	17	13	14	7	28	13		
Rock Creek	27	14	10	2	17	16	30	13	25	21	9	39	9	12	31	30	19	30	10	15	23	19	14	23	25	31	14	15	28	13		
Bimetallic	82	92	190	155	3	90	47	184	69	93	43	118	133	98	118	127	50	104	140	44	75	180	44	79	185	111	150	41	97	17		
Granite	1	1	24	23	4	1	23	3	4	18	1	23	2	1	23	1	1	22	1	22	2	1	23	5	20	23	50	41	21	23		
Princeton	12	12	1	1	...	4	5	7	7	...	1	11	1	6	5	3	1	6	3	1	10	3	5	5	2	2	3	9	16	11	14	
Sunrise	25	19	20	24	...	21	23	22	18	17	27	19	17	36	11	27	19	21	14	29	11	24	8	40	15	26	15	38	26	46	8	21
Stone Station	17	11	21	22	...	13	11	48	42	6	23	14	26	39	16	32	30	7	23	30	7	23	10	35	18	7	19	6	30	42	18	37
New Chicago	35	32	14	26	...	19	34	25	28	27	15	15	43	18	25	29	17	32	30	7	23	10	35	18	7	19	6	30	42	18	37	
Drummond	37	15	8	11	...	11	39	11	10	34	11	23	26	9	30	15	9	28	16	9	30	15	35	18	7	19	6	30	42	18	37	
Bearmouth	41	27	48	77	...	62	71	59	85	47	42	91	54	32	68	44	61	69	57	36	62	44	59	69	52	58	43	65	48	37	5	
Garnet	3	5	2	1	...	8	6	3	...	4	1	7	1	3	1	4	...	6	2	2	1	1	7	2	2	2	6	2	5	7	6	
Moose Lake	41	27	48	77	...	62	71	59	85	47	42	91	54	32	68	44	61	69	57	36	62	44	59	69	52	58	43	65	48	37	5	
Porter	3	5	2	1	...	8	6	3	...	4	1	7	1	3	1	4	...	6	2	2	1	1	7	2	2	2	6	2	5	7	6	
Gold Creek	2	1	1	7	...	3	11	7	7	3	1	4	7	3	4	...	4	4	7	...	3	8	4	3	12	1	7	1	3	6	6	
Hasmark	1	3	12	16	...	2	15	4	1	13	3	1	11	4	...	15	3	3	10	4	...	4	1	12	1	3	13	2	1	13	13	
Total	403	389	568	579	47	475	262	753	596	38	523	318	579	492	462	352	413	456	477	378	351	667	393	357	674	485	535	382	588	381	371	540
Pluralities	...	...	163	174	...	...	278	...	...	17	...	...	87	...	...	...	161	...	21	...	289	...	...	...	...	50	...	176	...	15	15	

PRECINCTS.

## OFFICIAL ELECTION RETURNS FOR JEFFERSON COUNTY. FOR ELECTION HELD NOVEMBER 6, 1900.

	President	Congress	Governor	Lieut. Governor	Sec'y of State	Attorney General	Treasurer	Auditor	Superintendent of Schools	Associate Justice	Judge 5th District	Members of Legislature
Caney, .....	17	119	94	26	13	101	21	23	101	23	101	82
Jefferson .....	8	25	13	1	27	1	11	23	101	23	101	82
Boulder .....	90	153	122	94	23	138	11	23	101	23	101	82
Whitehall .....	100	147	134	90	14	151	81	25	138	13	138	131
Wickes .....	24	60	48	26	5	50	28	6	14	48	30	44
Lower Boulder .....	6	24	19	6	19	6	4	20	6	2	21	15
Comet .....	2	10	4	6	5	6	5	4	6	4	6	8
Cold Springs .....	2	17	16	2	1	15	2	1	15	2	1	15
Jefferson River .....	8	6	6	8	6	8	6	8	6	8	6	8
Elk Horn .....	11	48	42	9	2	49	9	1	42	10	3	40
North Side Boulder .....	3	10	10	3	10	3	10	3	10	3	10	112
Basin .....	70	92	78	66	14	89	65	13	78	65	9	112
Ten Mile .....	9	11	9	1	10	8	1	10	8	1	10	8
Gregory .....	5	16	10	6	5	11	4	6	10	5	10	13
Corbin .....	10	26	25	10	24	10	1	25	11	22	12	19
Woodville .....	13	42	45	10	46	10	4	12	43	12	43	44
Mitchell Gulch .....	9	14	8	1	14	9	1	14	9	1	14	12
Lockhart .....	3	14	10	3	12	3	1	12	3	1	12	13
Eva May .....	13	21	19	13	3	20	13	2	21	13	2	15
Bernice .....	34	13	13	31	15	28	1	15	29	1	17	11
Elk Park .....	13	6	4	12	2	5	12	2	4	12	2	3
Mocking Bird .....	1	24	23	1	22	1	23	2	2	1	23	20
Bevinsville .....	8	25	21	9	25	8	21	9	8	20	8	20
Homestake .....	17	24	22	14	2	23	13	3	23	9	2	19
Rock Spur .....	5	20	14	5	3	16	5	3	16	5	2	17
McDermott .....	7	10	7	7	2	12	2	1	7	7	1	5
Total .....	488	860	834	487	94	919	460	119	863	491	81	846
Pluralities .....	492	347	.....	459	.....	459	.....	.....	.....	.....	.....	236
Brien, d. ....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
McDonald, d. ....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Berkin, d. ....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Willis, r. ....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Parker, f.-d. ....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Word, i.-d. ....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Von Tobel, r. ....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Milburn, f.-d. ....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Leamy, i.-d. ....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Harmon, r. ....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Welsh, f.-l. ....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
McLean, i.-d. ....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Proctor, r. ....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Calderhead, f.-p. ....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Livingston, i.-d. ....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Edwards, r. ....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Barret, f.-d. ....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Stewart, i.-d. ....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Porter, r. ....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Donovan, f.-p. ....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Yoder, r. ....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hays, i. and f.-d. ....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Marlon, i.-d. ....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bennett, r. ....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Higgins, f.-d. ....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hogan, i.-d. ....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Folsom, r. ....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Toole, f.-d. ....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Kelley, i.-d. ....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Murray, r. ....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Edwards, f.-p. ....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bryan, f.-d. ....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
McKinley, r. ....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

PRECINCTS.



## JEFFERSON COUNTY--Continued.

Members of the Legislature				Clerk's Discharge	Sheriff	Treasurer	Clerk & Recorder	Assessor	County Atty	Sup't of Schools	Adm'r	Coroner	Superintendent	County Commissioners																		
McNeill	Sponheim, R.	Davis, R.	Madden, i.-d.											Leary, i.-d.	Burkett, i.-d.	Holloway, d.	Ten Eyck, R.	Gibson, R.	Tuttle.	Dean.	Scharf	Simpkins.	Murphy.	Shepherd.	Murphy.	Frawley.	Fitcher.	Thompson.	Benjamin.	McNulty.	Baskeir.	Cralle.
42	51	16	8	64	9	96	35	94	82	52	76	55	113	21	74	86	56	100	22	107	27	110	95	105	51	63	17	36	7	37	Clancy	
19	17	15	1	2	...	26	14	19	16	20	23	15	28	10	22	16	18	23	13	123	106	142	107	133	127	130	96	109	8	7	Jefferson	
135	118	83	7	13	26	104	144	116	131	119	106	141	141	95	125	85	163	142	13	123	106	142	107	133	127	130	96	109	8	7	Boulder	
85	76	92	11	13	26	148	98	139	112	157	95	128	105	139	101	131	106	116	133	96	135	157	84	57	44	175	81	64	148	9	8	Whitehall
36	33	28	7	2	3	44	38	49	34	33	50	38	57	25	42	47	37	45	34	41	39	50	44	59	42	28	29	33	10	5	Wickes	
12	6	7	5	5	1	13	13	20	10	20	17	12	24	6	19	17	11	23	7	7	6	23	9	16	15	9	16	6	16	10	Lower Boulder	
7	8	3	2	1	1	4	7	5	7	11	4	6	6	5	7	5	6	2	8	3	5	6	3	3	4	18	10	7	9	10	Comet	
3	2	3	1	1	1	7	7	10	6	13	4	14	3	14	2	12	5	10	8	15	2	15	10	12	15	7	7	10	6	10	Cold Springs	
7	7	7	1	1	1	6	8	6	8	6	23	32	34	13	27	26	19	38	22	10	4	9	4	9	10	10	4	3	3	7	Jefferson River	
18	19	10	1	1	1	2	32	24	34	27	25	32	34	13	27	26	19	38	22	10	4	9	4	9	10	10	4	3	3	7	Ekhnorn	
3	3	3	1	1	1	9	5	10	3	9	4	8	5	10	3	8	4	10	4	7	51	110	81	59	62	44	81	118	78	2	7	North Side Boulder
68	39	45	11	7	1	91	44	121	65	97	49	111	75	77	59	100	48	117	7	10	10	10	9	12	11	9	11	6	1	1	Basin	
11	9	5	3	1	1	10	8	10	7	12	9	10	14	7	14	5	14	7	14	10	13	5	13	5	13	14	3	5	4	4	Ten Mile	
5	3	6	4	1	1	12	7	15	6	10	21	23	11	22	11	14	17	21	10	19	32	22	15	21	14	13	15	19	8	7	Gregory	
7	17	10	2	1	1	15	16	18	12	21	11	23	11	22	11	14	17	21	10	19	40	14	42	39	38	39	14	14	16	1	1	Corbin
10	10	11	1	1	1	42	37	16	40	15	41	40	15	42	13	17	12	13	14	8	14	14	12	14	14	8	7	8	1	3	Woodville	
10	11	8	1	1	1	15	8	12	12	11	12	13	15	7	12	4	6	10	9	5	11	7	8	7	7	7	6	6	1	1	Mitchell Gulch	
3	3	3	1	1	1	3	8	9	5	10	5	10	11	4	12	4	12	4	13	16	20	21	17	23	18	13	15	14	25	1	1	Loekhart
12	18	8	2	2	2	16	19	18	17	23	13	30	13	31	30	13	18	16	20	13	16	17	23	18	13	11	12	30	30	0	7	Eva May
35	36	31	1	1	1	13	13	13	12	13	12	13	12	7	12	7	13	6	12	2	20	2	21	23	23	2	19	3	3	3	2	Bernice
13	14	12	2	2	2	6	12	8	13	6	12	8	5	23	2	9	15	20	9	15	20	2	21	23	23	2	19	3	3	3	Elk Park	
5	3	1	4	4	4	17	4	17	8	9	13	18	5	23	2	9	19	9	20	9	20	9	21	7	23	20	21	9	8	8	1	Mocking Bird
12	12	6	5	5	5	22	7	17	15	18	9	22	9	21	8	19	22	19	20	22	21	7	22	20	20	21	9	8	8	1	1	Bevinsville
15	16	16	2	1	2	26	14	25	17	24	14	21	17	26	15	22	19	20	22	21	14	26	14	31	25	20	27	13	16	1	1	Homestake
6	6	6	2	2	2	17	7	17	8	20	3	16	4	18	7	17	8	15	10	17	7	17	6	18	15	13	19	6	3	11	2	Rock Spur
10	10	4	1	1	1	7	9	8	9	10	7	6	9	7	6	10	8	9	9	7	8	7	10	7	7	10	8	8	8	5	1	McDermott.
55	610	437	71	135	55	785	644	747	736	746	674	729	691	949	504	745	684	671	808	845	579	579	922	689	796	748	628	525	637	65	96	Total
						141		114		72	38		405			61			137	306	229			52	159	111						Pluralities

## OFFICIAL ELECTION RETURNS FOR LEWIS AND CLARKE COUNTY, FOR ELECTION HELD NOVEMBER 6, 1900.

PRECINCTS	President		Congress		Governor		Lieut. Governor		Sec'y of State		Att'y General		Treasurer		Auditor		Superintendent of Schools, %		Asso. Justice Supreme Ct.										
	McKinley, r.	Bryan, f.	Edwards, f.	Murray, r.	Kelley, f.	Toole, f.	Folsom, r.	Hogan, f.	Higgins, f.	Bennett, r.	Marion, i.	Hays, i.	Yoder, r.	Donovan, f.	Porter, r.	Stewart, f.	Barrett, f.	Edwards, r.	Livingston, i.	Calderhead, f.	Proctor, r.	McLean, i.	Welch, f.	Harmon, r.	Leamy, i.	Milburn, f.	Von Tobel, r.	Word, i.	
Helena, 1.	109	142	138	105	10	159	92	9	147	100	6	143	102	139	105	6	141	107	4	145	103	6	137	107	5	141	102	10	6
Helena, 2.	7	108	101	69	5	115	67	3	103	70	4	108	66	102	65	3	96	75	3	102	68	4	100	107	3	101	62	17	4
Helena, 3.	54	70	64	57	3	86	40	3	72	52	3	84	44	65	55	5	77	44	5	64	56	3	64	57	2	68	40	14	3
Helena, 4.	80	125	120	75	7	141	62	8	133	76	5	134	67	126	67	5	122	76	3	121	70	3	123	71	1	121	103	25	4
Helena, 5.	123	109	95	115	13	136	98	4	129	108	3	129	100	100	124	4	123	107	1	108	118	3	101	119	3	104	98	45	3
Helena, 6.	55	77	71	51	4	79	50	4	76	51	5	81	50	73	52	3	68	60	6	75	52	4	73	50	3	75	49	8	4
Helena, 7.	117	85	69	102	14	104	98	11	93	100	8	112	86	8	110	7	99	92	9	94	107	5	74	117	5	83	82	33	4
Helena, 8.	64	69	69	46	9	77	89	4	71	56	4	80	50	65	63	4	82	46	7	71	57	4	66	58	4	74	46	16	5
Helena, 9.	49	75	66	46	9	77	89	4	71	56	4	80	50	65	63	4	82	46	7	71	57	4	66	58	4	74	46	16	5
Helena, 10.	116	99	94	106	12	126	89	4	106	97	2	130	81	95	110	4	120	92	3	103	102	3	90	111	7	98	80	24	4
Helena, 11.	66	32	119	63	2	139	56	5	123	61	2	125	63	123	66	1	126	55	10	123	64	2	124	65	1	126	62	5	7
Helena, 12.	52	93	91	55	3	95	50	6	89	52	3	92	53	86	54	3	91	53	6	91	55	3	185	55	2	157	50	5	3
Helena, 13.	142	192	170	138	16	221	112	14	194	132	11	196	35	162	147	16	182	133	18	169	42	12	170	142	14	175	118	34	4
Helena, 14.	116	181	165	110	16	197	97	11	179	110	10	194	104	162	125	7	183	103	12	175	112	9	168	120	6	169	102	28	2
Marysville, 15.	71	138	113	73	11	121	74	12	121	76	6	125	73	120	73	6	117	75	6	115	75	5	119	72	6	113	76	8	3
Marysville, 16.	68	135	121	66	18	125	66	20	125	63	16	136	67	115	70	19	119	68	16	118	67	17	115	65	18	119	64	17	4
Unionville	19	17	17	16	21	15	11	18	12	12	12	16	18	13	20	15	19	15	13	13	20	14	20	14	20	15	17	17	2
Mouth of Nelson	12	34	34	12	34	34	11	36	12	12	34	12	34	12	34	15	33	14	11	33	13	34	34	34	34	33	12	12	2
Rimel	15	19	55	16	1	60	14	1	57	15	1	56	17	54	18	1	50	21	1	52	19	1	52	19	1	52	19	1	2
Butler	9	20	18	10	2	18	10	2	17	10	2	20	10	18	10	2	16	12	2	18	10	2	18	10	2	17	10	2	2
Kessler	60	78	64	55	15	82	50	12	73	53	13	85	53	67	56	15	64	63	10	72	55	11	65	57	12	67	46	19	4
Bald Butte	43	37	33	41	3	36	42	3	35	42	2	37	41	34	43	2	39	38	2	34	40	3	34	41	3	36	39	2	2
Empire and Gloster	8	20	18	3	4	3	20	7	19	8	3	19	8	18	8	19	8	18	8	18	8	19	8	19	8	18	19	4	4
Silver	5	22	18	4	3	20	6	3	20	4	3	22	4	20	4	3	20	6	3	21	4	3	21	5	3	18	5	4	1
Jay Gould	2	6	6	2	8	8	8	8	7	1	6	6	2	6	2	6	6	2	1	6	2	6	2	6	2	7	1	7	1
Canyon Creek	13	15	15	12	17	17	11	15	15	11	15	15	12	12	12	15	11	11	1	15	11	15	12	12	15	11	11	11	1
Wilburn's Station	3	11	11	3	11	3	3	3	11	3	3	11	3	11	3	3	11	3	4	11	3	3	11	3	11	3	11	3	1
College Place	30	36	38	28	43	43	26	39	39	24	36	36	29	38	30	30	36	36	3	37	29	1	39	28	39	27	1	1	1

## LEWIS AND CLARKE COUNTY—Continued.

President	Congress	Governor	Lieut. Governor	Sec'y of State	Att'y General	Treasurer	Auditor	Superintendent of Schools		Asso. Justice Supreme Court																	
PRECINCTS		Murray, r.....	Kelley, i.-d.. ..	Toole, f.-d....	Folsom, r.....	Hogan, i.-d.. ..	Higgins, f.-d....	Bennett, r.....	Marion, i.-d .....	Hays, f.-d....	Yoder, r....	Donovan, f.-p....	Porter, r.....	Stewart, i.-d....	Barret, f.-d....	Edwards, r....	Livingston, i.-d.....	Calderhead, f.-p ...	Proctor, r....	McLean, i.-d. ....	Welsh, f.-l....	Harmon, r....	Leamy, i.-d....	Milburn, f.-d.....	Von Tobel, r.....	Word, i.-d .....	
	Valley .....	35	17	1	35	15	3	35	16	2	34	18	32	18	28	21	1	33	18	1	32	19	1	30	16	5	
	East Helena .....	199	193	8	174	183	15	165	192	9	171	192	161	197	6	154	191	6	156	194	10	156	196	8	164	185	12
	F'ch Bar & Spokane .....	2	15	2	15	2	15	2	15	2	15	2	15	2	15	2	15	2	15	2	15	2	15	2	15	2	15
	Mitchell .....	6	8	6	9	4	1	7	6	1	8	5	7	6	1	7	5	1	6	6	1	7	5	1	8	4	9
	Craig .....	25	26	25	30	22	4	29	22	1	29	23	27	25	28	23	6	26	26	26	26	27	23	23	23	22	22
	Dearborn .....	5	3	5	4	5	4	5	4	5	3	6	3	6	3	6	3	6	3	6	3	6	3	6	3	6	5
	Hogan .....	20	7	20	16	7	19	7	19	5	20	6	19	7	19	7	19	6	20	6	20	7	6	6	5	20	5
	Augusta .....	66	82	65	88	57	5	81	59	5	79	64	76	63	6	74	70	2	70	67	4	76	66	4	75	62	8
	Dearborn Canyon .....	6	6	6	6	6	6	5	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	7	5	5
	Rock Creek Basin .....	13	11	10	12	12	11	12	11	12	10	12	10	14	10	13	10	13	10	14	10	14	10	14	11	13	13
	Middle Fork Dearborn .....	24	11	23	13	22	12	23	23	11	23	11	23	11	23	11	24	11	23	11	23	11	23	12	23	12	13
	York .....	19	34	18	34	17	36	17	36	15	35	18	35	17	35	17	35	17	36	16	17	35	17	34	15	1	1
	Canyon Ferry .....	17	43	38	43	17	40	15	40	15	42	15	41	17	40	17	2	38	17	2	38	17	40	18	1	3	3
	Lincoln .....	15	31	27	32	14	28	14	28	14	29	12	27	14	27	15	27	15	27	13	27	28	13	29	12	1	1
	Silver Camp .....	7	29	30	5	29	6	29	6	29	30	5	30	5	30	5	30	5	30	5	29	28	13	31	4	4	4
Stemple .....	3	6	3	1	6	2	1	6	1	7	1	5	2	1	6	1	1	5	2	1	5	2	1	3	1	1	
Cooper Lake .....	2	6	7	1	6	2	7	1	6	6	2	6	2	7	2	7	2	6	1	7	7	2	6	2	2	2	
Birdseye .....	13	14	15	19	9	16	11	16	11	15	11	15	11	15	11	15	11	16	9	16	16	9	16	10	10	10	
Dickerts .....	3	2	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	33	16	7	32	16	7	33	16	16	
Wolf Creek .....	14	36	32	1	35	15	32	17	32	37	17	32	18	31	19	19	19	7	.....	1	32	16	.....	33	16	.....	
Total	2063	2554	1953	199	2992	1734	179	275	1896	137	2579	1845	2559	2018	139	2696	1927	145	2600	1972	128	2550	2014	125	2067	1762	358
Pluralities .....	710	601	1218	819	849	819	849	819	849	1034	541	541	541	769	769	769	769	628	.....	.....	536	.....	.....	815	.....	.....	

## LEWIS AND CLARKE COUNTY—Continued.

PRECINCTS.	Judge 1st Judicial District			State Senator		Members of the Legislature																			
	Clements, f.-p ...	Smith, r.....	Heywood, r....	Biggs, f.-d .....	Huffaker, r .....	Stuewe, i.-d .....	Baker, f.-d ...	Sullivan, f.-d... ..	Hartwig, f.-d ...	Urquhart, f.-d...	Cram, f.-d... ..	Donaldson, f.-d...	Sanden, f.-p... ..	Landstrum, r....	Balliett, r.....	Morris, r.....	Mares, r... ..	Sillers, r.....	Wick, r.....	Working, r....	Brandagee, i.-d ..	Norris, i.-d ...	Lyden, i.-d ...	Grindrod, i.-d ...	McConnell, i.-d...
Helena, 1. ....	114	143	138	104	133	112	9	142	141	148	150	146	139	138	102	103	101	107	107	102	111	4	4	3	4
Helena, 2.....	85	99	90	65	96	71	7	101	107	106	74	73	105	98	104	66	62	65	73	62	69	3	2	4	4
Helena, 3.....	63	67	72	49	70	53	4	71	75	76	74	73	129	69	71	49	53	56	51	48	52	5	3	2	5
Helena, 4.....	102	127	114	68	108	86	9	127	127	133	128	129	119	130	68	69	70	57	77	75	117	9	8	9	8
Helena, 5.....	87	95	160	107	99	29	9	124	114	130	118	129	108	107	113	118	101	116	116	99	117	6	2	2	1
Helena, 6.....	63	70	76	54	72	54	7	76	77	76	79	77	71	81	50	54	48	49	51	49	56	4	4	9	7
Helena, 7.....	83	73	137	102	82	112	9	92	92	100	194	93	82	87	104	104	102	104	112	96	108	15	9	7	7
Helena, 8.....	73	62	77	47	69	62	4	71	73	75	74	75	67	75	60	57	53	51	58	52	60	7	8	7	6
Helena, 9.....	52	59	81	46	63	54	5	65	74	66	64	64	62	71	44	45	43	43	48	44	46	10	8	9	8
Helena, 10.....	77	91	164	97	101	108	8	116	110	119	114	118	104	115	103	101	92	92	119	83	99	12	7	10	5
Helena, 11.....	110	114	89	61	120	75	2	131	128	133	132	136	128	131	61	63	64	69	72	75	1	1	5	3	2
Helena, 12.....	72	84	80	52	87	63	4	87	85	85	84	89	84	89	60	55	53	55	55	51	57	4	4	7	6
Helena, 13.....	146	153	220	142	174	154	14	195	185	219	202	200	176	206	133	133	110	135	130	147	18	13	20	7	16
Helena, 14.....	137	155	188	110	167	121	10	180	182	188	187	180	169	180	115	111	101	105	125	102	118	5	6	7	6
Marysville, 15.....	88	125	110	63	106	83	11	100	132	115	113	115	105	108	129	71	68	66	74	64	80	5	6	7	8
Marysville, 16.....	86	128	120	66	115	71	21	112	126	119	114	118	115	118	118	69	61	64	70	61	75	14	14	14	15
Unionville .....	12	17	22	18	12	21	16	15	16	20	16	14	15	19	19	16	19	19	18	16	20	1	1	1	1
Mouth of Nelson .....	29	32	16	14	30	15	1	33	32	35	33	32	32	32	15	16	14	16	16	14	15	1	1	1	1
Elmire .....	46	49	27	18	51	20	1	55	58	55	58	56	57	55	15	16	14	16	16	14	15	1	1	1	1
Butler .....	14	16	16	11	18	10	2	16	17	15	16	16	15	20	12	11	10	10	11	10	11	2	2	2	2
Kessler .....	58	80	87	52	60	61	21	72	74	77	70	73	64	80	55	54	52	55	61	48	62	13	14	13	8
Bald Butte .....	28	38	52	37	39	37	3	32	31	34	32	25	33	33	57	43	41	39	41	34	44	2	3	3	3
Empire and Gloster .....	11	18	17	11	13	9	19	20	20	19	17	17	17	12	8	8	8	8	8	8	13	3	3	3	3
Silver .....	15	18	14	6	19	5	3	19	23	22	19	20	21	22	5	5	4	4	5	6	7	3	2	3	3
Jay Gould .....	4	4	4	4	7	1	8	7	8	8	8	8	8	8	8	8	8	8	8	8	8	3	2	3	3
Canyon Creek .....	13	14	14	11	13	13	14	15	14	15	14	15	14	14	17	13	12	10	12	8	12	1	1	1	1
Wilburn's Station .....	10	11	4	3	11	3	11	11	11	11	11	11	11	14	3	3	3	3	3	3	3	1	1	1	1
College Place .....	33	37	37	24	36	31	1	40	37	41	40	47	35	35	24	23	22	22	29	34	28	1	1	1	1



## LEWIS AND CLARKE COUNTY—Continued.

PRECINCTS.	Judge 1st Judicial District		State Senator		Members of the Legislature									
					McCConnell, i.-d...	Grindrod, i.-d...	Lyden, i.-d...	Norris, i.-d...	Brandagee, i.-d...	Working, r...	Wick, r...	Sillers, r...	Mares, r...	Morris, r...
Valley .....	28	29	16	27	36	43	36	32	32	36	14	17	14	16
East Helena .....	148	151	191	168	168	175	195	195	166	177	185	174	180	180
Fr'ch Bar & Spokane .....	13	15	2	15	15	15	15	15	2	2	2	2	2	2
Mitchell .....	4	7	10	7	7	6	8	8	6	6	6	6	5	5
Craig .....	20	28	20	23	29	29	24	24	27	24	23	25	25	25
Dearborn .....	2	3	5	4	4	4	4	4	4	4	4	4	4	4
Hogan .....	4	7	21	20	6	6	6	6	6	6	6	6	6	6
Augusta .....	47	87	59	67	73	73	70	69	74	71	66	61	64	64
Dearborn Canyon .....	3	8	10	3	6	5	7	8	6	6	6	7	4	5
Rock Creek Basin .....	9	10	12	1	9	10	11	11	10	10	13	13	15	13
Middle Fork Dearborn .....	9	10	27	23	10	11	11	11	10	24	23	23	19	19
York .....	24	34	35	15	32	35	36	36	33	20	16	15	13	13
Canyon Ferry .....	30	37	31	16	39	38	41	38	41	20	16	16	16	16
Lincoln .....	32	30	14	10	28	26	28	25	25	14	11	13	13	13
Silver Camp .....	29	30	6	32	32	32	32	32	30	6	5	4	4	4
Stemple .....	5	6	4	2	5	5	5	5	5	4	3	3	3	3
Cooper Lake .....	2	5	7	2	6	7	7	7	8	1	1	1	1	1
Birdseye .....	14	15	8	16	11	16	17	17	18	7	9	8	9	9
Dickerts .....	1	7	6	7	7	5	7	7	7	7	1	1	1	1
Wolf Creek .....	23	28	18	24	32	34	32	32	29	22	19	14	14	14
Total .....	2160	2826	1883	2492	2123	2761	2598	2712	1067	1935	1785	1871	1871	1871
Pluralities .....	356	666	376	376	2810	2747	2598	2712	1067	1935	1785	1871	1871	1871

LEWIS AND CLARKE COUNTY—Continued.

PRECINCTS	Clerk Dist- rict Court	Sheriff	Treas'r	Clerk & Record'r	Assess'r	County Attorney	Superintdnt of School's	Adm'r	Coroner	Surveyor	Auditor	County Commissioners				
												Hutchinson, d. . . . .	Hundley, d. . . . .	Wegner, d. . . . .	Larson, r. . . . .	Jacobs, r. . . . .
Helena, 1. . . . .	129	149	110	135	116	137	114	141	125	120	111	140	130	117	107	114
Helena, 2. . . . .	95	77	113	106	67	100	83	90	99	72	66	102	130	117	107	114
Helena, 3. . . . .	74	52	79	70	57	67	60	46	80	66	59	73	76	76	64	69
Helena, 4. . . . .	119	78	127	123	79	117	82	113	113	106	81	122	111	88	71	90
Helena, 5. . . . .	120	107	125	100	133	102	134	71	159	102	128	108	111	137	68	137
Helena, 6. . . . .	76	53	83	77	59	73	63	64	69	75	56	47	82	86	48	70
Helena, 7. . . . .	94	101	96	108	97	102	79	66	132	83	106	98	119	118	84	70
Helena, 8. . . . .	72	55	85	76	59	72	68	56	81	69	64	95	63	79	65	67
Helena, 9. . . . .	65	49	70	62	67	51	58	47	69	63	54	41	58	77	61	52
Helena, 10. . . . .	110	96	96	122	96	121	130	72	143	108	96	91	120	134	78	90
Helena, 11. . . . .	131	64	145	60	123	15	119	111	86	115	81	70	136	136	113	113
Helena, 12. . . . .	99	43	107	43	88	60	80	81	69	86	57	55	87	96	86	87
Helena, 13. . . . .	175	142	198	151	178	164	159	180	184	156	174	153	187	188	162	162
Helena, 14. . . . .	179	109	182	119	172	131	151	142	160	148	141	118	139	154	136	138
Marysville, 15. . . . .	130	66	140	72	123	85	127	81	126	84	116	82	116	73	104	74
Marysville, 16. . . . .	124	69	131	76	118	89	119	88	122	83	121	49	136	75	104	65
Unionville. . . . .	19	13	16	21	17	19	20	16	26	17	17	18	14	21	13	17
Mouth of Nelson. . . . .	31	16	29	18	29	18	31	16	25	22	34	13	31	16	30	17
Rimini. . . . .	50	23	54	19	51	22	50	23	52	19	18	54	51	22	51	22
Batler. . . . .	19	10	18	11	21	9	19	13	19	11	11	11	11	21	10	10
Kessler. . . . .	86	49	85	59	66	75	68	65	85	70	64	56	66	87	50	61
Bald Butte. . . . .	39	37	43	37	44	37	38	33	45	35	40	37	39	36	34	35
Empire and Gloster. . . . .	8	18	10	18	9	17	20	8	16	12	19	8	11	15	16	17
Silver. . . . .	22	4	26	3	24	5	23	5	19	8	19	6	19	15	19	23
Jay Gould. . . . .	7	1	6	2	6	2	3	5	8	6	2	2	5	7	6	7
Canyon Creek. . . . .	13	13	14	11	15	12	18	9	18	12	15	16	16	18	10	10

## LEWIS AND CLARKE COUNTY—Continued.

PRECINCTS	Clerk Dist- rict Court	She	Treas'r	Clerk & Record'r	Ass	County Attorney	Superintendent of Schools	Aim'r	Coroner	Surveyor	Auditor	County Commissioners	
Wilburn's Station .....	14	2	11	3	3	11	10	4	3	4	11	3	3
College Place .....	38	31	38	34	1	42	34	36	30	36	40	30	3
Valley .....	34	18	38	17	33	32	21	34	19	20	43	10	3
East Helena .....	168	183	177	193	223	173	166	197	188	194	182	175	11
Fr'ch Bar & Spokane .....	14	3	14	3	2	15	2	3	1	2	15	2	11
Mitchell .....	8	5	6	8	7	7	5	9	6	8	10	4	11
Craig .....	30	19	32	19	39	32	29	24	27	23	34	14	11
Dearborn .....	8	6	1	8	1	4	2	7	2	8	4	5	11
Hogan .....	8	16	6	20	18	14	13	23	6	20	11	15	11
Augusta .....	82	53	74	73	78	72	69	79	69	75	85	60	11
Dearborn Canyon .....	9	15	12	10	11	13	8	9	5	9	7	5	7
Rock Creek Basin .....	5	5	5	5	9	8	3	9	5	6	13	10	11
Middle Fork Dearborn .....	14	24	14	23	11	23	13	15	13	12	12	11	11
York .....	34	16	37	16	34	41	33	39	33	32	39	13	17
Canyon Ferry .....	40	15	40	18	44	41	36	34	23	37	45	13	18
Lincaln .....	34	10	21	17	24	36	22	23	25	19	30	24	17
Silver Camp .....	30	4	28	8	30	31	5	6	5	8	31	4	20
Stemple .....	7	2	5	3	7	7	2	3	1	4	20	31	12
Cooper Lake .....	5	3	6	6	5	6	3	6	3	4	4	6	6
Birdseye .....	14	10	21	6	17	16	11	11	14	12	17	9	3
Dickerts .....	7	.....	1	6	1	1	6	1	1	4	15	14	10
Wolf Creek .....	33	14	32	17	37	31	29	20	32	16	38	25	19
Total .....	2722	1911	2864	2027	2651	2579	2196	2555	2514	2159	3054	2456	2135
Pluralities .....	811	.....	837	.....	330	360	.....	233	355	.....	1323	66	153





## MADISON COUNTY—Continued.

[illegible]

OFFICIAL ELECTION RETURNS FOR MEAGHER COUNTY, FOR ELECTION HELD NOVEMBER 9, 1900.

PRECINCTS.	President	Congress	Governor		Lieut. Gov.		Sec'y State	Att'y. Gen.	Treasurer		Auditor	Supt. Schools		Associate Justice Sup'r Court																		
	McKinley, r.....																															
	Bryan, d.....																															
	Edwards, f.-p.....																															
	Murray, r.....																															
	Kelley, i.-d.....																															
	Toole, f.-d.....																															
	Folsom, r.....																															
	Hogan, i.-d.....																															
	Higgins, f.-d.....																															
	Bennett, r.....																															
	Marion, i.-d.....																															
	Hays, f.-d.....																															
	Yoder, r.....																															
	Donovan, f.-p.....																															
	Porter, r.....																															
	Stewart, i.-d.....																															
	Barret, f.-d.....																															
	Edwards, r.....																															
	Livingston, i.-d.....																															
	Calderhead, f.-p.....																															
	Proctor, r.....																															
	McLean, i.-d.....																															
	Welsh, f.-l.....																															
	Harmon, r.....																															
	Leamy, i.-d.....																															
	Milburn, f.-d.....																															
	Von Tobel, r.....																															
	Word, i.-d.....																															
Rock Creek .....	10	3	2	9	1	4	8	3	9	2	10	.....	2	10	.....	2	10	.....	2	10	.....	2	10	.....	2	10	.....	2	10	.....		
Shannon .....	6	9	5	5	3	10	3	2	8	4	3	.....	6	4	3	.....	6	4	.....	6	4	.....	6	4	.....	5	4	.....	5	4	.....	
Ft. Logan .....	23	25	20	25	2	25	22	2	24	25	2	.....	24	2	22	.....	23	25	.....	23	25	.....	23	25	.....	21	24	.....	21	24	.....	
W. S. Springs .....	137	171	97	138	58	134	153	34	119	139	45	158	137	105	140	.....	101	143	.....	98	144	.....	98	144	.....	102	141	.....	102	141	.....	
Sheep Creek .....	7	6	6	7	.....	6	7	.....	5	7	.....	5	8	5	.....	.....	5	8	.....	5	8	.....	5	8	.....	5	8	.....	5	8	.....	
Copper .....	23	35	12	21	22	23	18	22	18	22	19	35	20	13	21	.....	13	23	.....	14	19	.....	14	19	.....	13	21	.....	13	21	.....	
Battle Creek .....	13	13	10	13	2	12	13	2	11	13	.....	13	13	9	14	.....	9	13	.....	11	13	.....	11	13	.....	10	13	.....	10	13	.....	
Dorsey .....	14	4	6	13	.....	6	14	.....	5	14	.....	6	14	6	14	.....	6	14	.....	5	13	.....	5	13	.....	6	14	.....	6	14	.....	
Castle .....	24	33	19	22	14	34	20	8	25	22	.....	31	23	20	23	.....	20	21	.....	18	23	.....	18	23	.....	22	29	.....	22	29	.....	
Comb Creek .....	19	3	4	18	.....	7	14	.....	5	17	.....	4	18	3	18	.....	3	18	.....	1	18	.....	1	18	.....	3	18	.....	3	18	.....	
Martinsdale .....	31	41	32	32	9	43	25	7	39	26	.....	44	28	34	28	.....	33	27	.....	8	33	.....	8	33	.....	33	26	.....	33	26	.....	
Two Dot .....	34	21	20	38	2	24	35	.....	22	36	.....	1	38	20	38	.....	19	37	.....	3	19	.....	3	19	.....	3	18	.....	3	18	.....	
Big Elk .....	8	4	6	8	.....	9	6	.....	7	8	.....	5	8	5	8	.....	7	8	.....	5	8	.....	5	8	.....	5	8	.....	5	8	.....	
Harlowtown .....	33	23	17	31	4	26	30	3	21	31	.....	22	31	18	32	.....	17	33	.....	2	17	.....	2	17	.....	2	18	.....	2	18	.....	
Winnecook .....	13	2	1	13	1	1	13	1	1	13	.....	1	13	1	13	.....	1	13	.....	1	13	.....	1	13	.....	1	13	.....	1	13	.....	
Living Springs .....	3	3	3	3	.....	3	3	.....	3	3	.....	3	3	2	3	.....	2	3	.....	2	3	.....	2	3	.....	2	3	.....	2	3	.....	
Oka .....	8	2	1	6	.....	1	7	.....	1	6	.....	1	6	1	6	.....	1	6	.....	1	6	.....	1	6	.....	1	6	.....	1	6	.....	
Total .....	409	398	261	402	118	368	392	81	316	394	91	384	398	271	405	.....	204	402	.....	254	408	.....	106	333	.....	268	391	.....	268	391	.....	
Pluralities .....	11	.....	.....	141	.....	.....	24	.....	.....	78	.....	.....	14	.....	134	.....	138	.....	154	.....	138	.....	154	.....	154	.....	125	.....	125	.....	125	.....

## MEAGHER COUNTY—Continued.

PRECINCTS.	Judge 9th District	State Senator		Members of the Legislature					Clerk Dist Co't			Sheriff		Treasurer		Clerk and Recorder			Assessor					
	Armstrong, d... ..	Hartfield, r... ..	Anderson, r... ..	McKay, i.-d. ....	Murray, r... ..	Godfrey, r... ..	Blewett, d... ..	Kumpe, d... ..	Freezer, i.-d ... ..	Duncan, i.-d... ..	Winscott, d... ..	Badger, r... ..	Freeman, i.-d... ..	Hill ... ..	Jobb... ..	Good ... ..	Wallwork ... ..	Gibson ... ..	Harden ... ..	Herbert ... ..	Lane.....	Berry ... ..	Mayn ... ..	Ray ... ..
Rock Creek ... ..	8	4	2	10	.....	11	8	2	3	.....	3	8	1	12	.....	1	5	8	9	3	.....	2	11	
Shannon ... ..	6	5	3	7	5	11	5	.....	3	.....	.....	5	7	1	9	.....	1	9	5	7	5	.....	7	
Ft. Logan ... ..	24	20	12	24	10	28	22	8	15	10	4	13	27	1	9	.....	22	26	28	11	3	15	25	
W. S. Springs ... ..	146	127	90	154	52	205	133	72	102	49	51	112	141	26	142	136	147	157	154	107	24	108	157	
Sheep Creek ... ..	7	6	4	8	1	8	7	5	5	.....	.....	3	10	.....	9	.....	1	5	8	9	4	.....	4	
Copper ... ..	20	14	31	24	1	18	15	52	34	.....	.....	36	18	1	18	.....	38	19	23	33	1	26	33	
Battle Creek ... ..	16	10	4	17	4	15	14	6	5	4	5	4	16	2	11	.....	6	14	8	9	5	1	11	
Dorsey ... ..	14	6	1	14	5	15	13	.....	2	4	4	4	11	4	12	.....	7	13	14	1	5	3	17	
Castle ... ..	28	22	19	24	10	33	15	12	29	12	6	25	16	9	19	.....	34	22	29	19	6	38	15	
Comb Creek ... ..	18	4	11	11	.....	18	12	9	13	.....	.....	10	11	1	21	.....	15	7	16	5	1	10	12	
Martinsdale ... ..	34	29	17	43	10	40	43	15	19	.....	5	14	51	1	43	.....	26	45	40	19	5	23	44	
Two Dot ... ..	40	19	7	41	8	43	45	.....	4	12	.....	10	42	1	27	.....	2	10	48	39	8	11	36	
Big Elk ... ..	5	8	1	10	3	11	9	.....	.....	6	.....	.....	12	.....	10	.....	4	6	7	10	.....	3	6	
Harlowtown ... ..	34	18	12	32	7	31	29	8	8	13	3	19	20	3	10	.....	23	23	23	4	27	26	24	
Winnecook ... ..	13	1	2	13	.....	13	14	1	2	.....	2	2	13	1	1	.....	2	13	13	2	2	3	12	
Living Springs ... ..	3	2	3	3	.....	3	4	2	2	.....	.....	2	3	.....	2	.....	3	3	2	2	.....	2	3	
Oka ... ..	6	2	1	7	.....	5	7	1	2	.....	.....	1	6	.....	6	.....	1	6	6	1	.....	1	6	
Total ... ..	422	297	220	442	116	508	395	193	238	124	33	264	412	54	388	278	147	359	424	430	233	93	286	423
Pluralities ... ..	125	.....	.....	222	.....	270	157	.....	.....	.....	.....	148	.....	110	.....	.....	.....	65	197	.....	.....	.....	137	.....





PRECINCTS

Precincts	President		Mem. Congress		Governor		Lieut. Gov.		Sec'y State		Att'y Gen.		State Treas.		State Auditor		Supt. Schools		Associate Justice Sup're Court									
PRECINCTS	Bryan, f.-d.....	1893	1397	490	1319	1548	500	1219	1570	496	1156	1787	1237	1414	420	1204	1353	482	1254	1396	432	1267	1351	429	1278	1395	461	1173
	McKinley, r.....	1892	1397	490	1319	1548	500	1219	1570	496	1156	1787	1237	1414	420	1204	1353	482	1254	1396	432	1267	1351	429	1278	1395	461	1173
	Edwards, f.-p.....	1892	1397	490	1319	1548	500	1219	1570	496	1156	1787	1237	1414	420	1204	1353	482	1254	1396	432	1267	1351	429	1278	1395	461	1173
	Kelley, i.-d.....	1892	1397	490	1319	1548	500	1219	1570	496	1156	1787	1237	1414	420	1204	1353	482	1254	1396	432	1267	1351	429	1278	1395	461	1173
	Murray, r.....	1892	1397	490	1319	1548	500	1219	1570	496	1156	1787	1237	1414	420	1204	1353	482	1254	1396	432	1267	1351	429	1278	1395	461	1173
	Toole, f.-d.....	1892	1397	490	1319	1548	500	1219	1570	496	1156	1787	1237	1414	420	1204	1353	482	1254	1396	432	1267	1351	429	1278	1395	461	1173
	Hogan, i.-d.....	1892	1397	490	1319	1548	500	1219	1570	496	1156	1787	1237	1414	420	1204	1353	482	1254	1396	432	1267	1351	429	1278	1395	461	1173
	Folsom, r.....	1892	1397	490	1319	1548	500	1219	1570	496	1156	1787	1237	1414	420	1204	1353	482	1254	1396	432	1267	1351	429	1278	1395	461	1173
	Higgins, f.-d.....	1892	1397	490	1319	1548	500	1219	1570	496	1156	1787	1237	1414	420	1204	1353	482	1254	1396	432	1267	1351	429	1278	1395	461	1173
	Marion, i.-d.....	1892	1397	490	1319	1548	500	1219	1570	496	1156	1787	1237	1414	420	1204	1353	482	1254	1396	432	1267	1351	429	1278	1395	461	1173
	Bennet, r.....	1892	1397	490	1319	1548	500	1219	1570	496	1156	1787	1237	1414	420	1204	1353	482	1254	1396	432	1267	1351	429	1278	1395	461	1173
	Hays, i. and f.-d.....	1892	1397	490	1319	1548	500	1219	1570	496	1156	1787	1237	1414	420	1204	1353	482	1254	1396	432	1267	1351	429	1278	1395	461	1173
Yoder, r.....	1892	1397	490	1319	1548	500	1219	1570	496	1156	1787	1237	1414	420	1204	1353	482	1254	1396	432	1267	1351	429	1278	1395	461	1173	
Donovan, f.-p.....	1892	1397	490	1319	1548	500	1219	1570	496	1156	1787	1237	1414	420	1204	1353	482	1254	1396	432	1267	1351	429	1278	1395	461	1173	
Stewart, i.-d.....	1892	1397	490	1319	1548	500	1219	1570	496	1156	1787	1237	1414	420	1204	1353	482	1254	1396	432	1267	1351	429	1278	1395	461	1173	
Porter, r.....	1892	1397	490	1319	1548	500	1219	1570	496	1156	1787	1237	1414	420	1204	1353	482	1254	1396	432	1267	1351	429	1278	1395	461	1173	
Barret, f.-d.....	1892	1397	490	1319	1548	500	1219	1570	496	1156	1787	1237	1414	420	1204	1353	482	1254	1396	432	1267	1351	429	1278	1395	461	1173	
Livingston, i.-d.....	1892	1397	490	1319	1548	500	1219	1570	496	1156	1787	1237	1414	420	1204	1353	482	1254	1396	432	1267	1351	429	1278	1395	461	1173	
Edwards, r.....	1892	1397	490	1319	1548	500	1219	1570	496	1156	1787	1237	1414	420	1204	1353	482	1254	1396	432	1267	1351	429	1278	1395	461	1173	
Calderhead, f.-p.....	1892	1397	490	1319	1548	500	1219	1570	496	1156	1787	1237	1414	420	1204	1353	482	1254	1396	432	1267	1351	429	1278	1395	461	1173	
McLean, i.-d.....	1892	1397	490	1319	1548	500	1219	1570	496	1156	1787	1237	1414	420	1204	1353	482	1254	1396	432	1267	1351	429	1278	1395	461	1173	
Proctor, r.....	1892	1397	490	1319	1548	500	1219	1570	496	1156	1787	1237	1414	420	1204	1353	482	1254	1396	432	1267	1351	429	1278	1395	461	1173	
Welsh, f.-l.....	1892	1397	490	1319	1548	500	1219	1570	496	1156	1787	1237	1414	420	1204	1353	482	1254	1396	432	1267	1351	429	1278	1395	461	1173	
Leamy, i.-d.....	1892	1397	490	1319	1548	500	1219	1570	496	1156	1787	1237	1414	420	1204	1353	482	1254	1396	432	1267	1351	429	1278	1395	461	1173	
Harmon, r.....	1892	1397	490	1319	1548	500	1219	1570	496	1156	1787	1237	1414	420	1204	1353	482	1254	1396	432	1267	1351	429	1278	1395	461	1173	
Milburn, f.-d.....	1892	1397	490	1319	1548	500	1219	1570	496	1156	1787	1237	1414	420	1204	1353	482	1254	1396	432	1267	1351	429	1278	1395	461	1173	
Ward, i.-d.....	1892	1397	490	1319	1548	500	1219	1570	496	1156	1787	1237	1414	420	1204	1353	482	1254	1396	432	1267	1351	429	1278	1395	461	1173	
Von Tobel, r.....	1892	1397	490	1319	1548	500	1219	1570	496	1156	1787	1237	1414	420	1204	1353	482	1254	1396	432	1267	1351	429	1278	1395	461	1173	

## MISSOULA COUNTY—Continued.

PRECINCTS	District Judge		Members of the Legislature.														Clerk Dist. Court		Sheriff	Treasurer	Clerk & Assessor's Record							
	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907			1908	1909	1910					
Missoula, 1.....	150	164	117	118	113	105	57	32	43	25	185	146	161	168	128	169	32	189	135	14	214	113	173	151	172	144	Gogerty, r.....	
Missoula, 2.....	109	114	113	115	118	117	50	16	21	17	112	76	100	98	95	130	15	131	91	21	174	68	137	99	123	114	Massey, d.....	
Missoula, 3.....	191	247	177	191	178	167	80	47	59	36	220	180	230	218	186	235	30	267	197	19	283	159	238	197	222	139	Dickinson, r.....	
Missoula, 4.....	167	144	133	147	144	150	71	38	51	47	164	111	143	137	106	182	44	169	124	27	236	105	194	130	190	132	Wilkinson, d.....	
DeSmet.....	15	28	14	19	9	13	12	17	12	11	15	15	26	17	11	21	7	29	18	5	29	21	27	19	24	19	Maclay, d.....	
Arlee.....	9	30	3	4	4	4	4	4	4	4	39	35	36	33	15	21	1	20	28	.....	14	25	9	23	12	26	Higgins, d.....	
Vermilion.....	7	10	4	5	4	4	4	4	4	4	17	12	12	13	7	10	1	2	14	.....	9	46	26	45	27	40	Gerrity, l-p.....	
Quartz.....	20	31	23	25	27	23	30	17	17	24	27	25	36	25	17	36	20	27	40	28	9	43	50	33	36	52	Darbee, r.....	
Bonita.....	23	36	37	17	28	30	57	14	13	15	36	32	29	29	11	56	11	27	30	21	43	50	33	36	52	29	Prescott, f-d.....	
Clinton.....	23	35	47	28	34	33	39	13	13	17	27	13	26	12	20	35	4	7	2	2	10	1	39	29	35	29	Dickinson, r.....	
Carte.....	10	.....	9	7	10	9	1	1	1	5	1	.....	1	.....	6	1	4	7	2	2	48	15	39	29	35	29	Wilkinson, d.....	
Carleton.....	19	25	14	20	29	18	2	5	1	3	28	17	22	22	24	25	8	14	26	6	22	25	18	27	22	33	Maclay, d.....	
Cold Springs.....	30	42	24	26	28	23	5	9	9	3	43	30	34	30	24	25	25	19	48	27	1	49	24	38	30	34	Higgins, d.....	
Saltsee.....	24	10	14	16	20	14	11	6	9	14	15	7	8	5	19	11	3	19	15	1	28	6	22	10	28	6	Gerrity, l-p.....	
Grass Valley.....	45	71	18	22	15	18	3	12	12	9	109	20	86	99	37	58	29	94	33	2	104	27	81	43	86	39	Darbee, r.....	
Bonner.....	27	14	25	28	27	26	15	15	15	19	17	12	15	15	17	27	17	32	13	12	49	15	44	17	38	23	Prescott, f-d.....	
Potomac.....	28	49	34	38	56	49	47	28	32	39	38	25	41	31	30	45	36	68	35	20	83	33	85	30	87	28	Dickinson, r.....	
Superior.....	119	84	78	74	18	67	41	32	37	75	97	78	92	86	86	94	29	121	84	6	131	80	124	86	152	60	Maclay, d.....	
Plains.....	47	64	40	37	43	47	31	30	25	27	63	61	63	63	34	78	22	63	68	10	71	66	72	64	112	30	Higgins, d.....	
Thompson.....	36	46	49	42	26	34	38	27	25	27	40	19	78	22	38	31	33	60	28	18	76	26	74	29	15	34	Gerrity, l-p.....	
Frenchtown.....	3	14	5	1	4	3	6	1	1	1	10	7	12	9	2	9	4	8	8	.....	6	9	15	12	24	6	Massey, d.....	
Grass Valley.....	15	14	17	17	16	16	.....	.....	.....	.....	15	12	12	11	14	11	.....	23	8	.....	16	9	15	12	24	6	Dickinson, r.....	
Heron.....	23	48	29	28	25	29	37	19	20	16	33	28	51	25	13	49	23	23	29	8	60	26	58	23	44	40	Maclay, d.....	
Lo Lo.....	5	4	11	12	11	10	2	2	3	2	3	1	3	2	3	8	2	6	6	2	7	13	1	10	5	10	4	Higgins, d.....
Martina.....	51	52	57	52	68	61	47	8	.....	18	50	32	40	43	44	69	9	75	34	14	86	34	77	43	87	33	Darbee, r.....	
St. Regis.....	4	1	2	2	1	1	1	8	1	.....	3	3	3	3	1	4	.....	3	2	.....	2	2	2	2	3	5	Prescott, f-d.....	
Trout Creek.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Gerrity, l-p.....	
Noxon.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Darbee, r.....	
Nine Mile.....	67	25	108	99	90	102	13	3	4	2	19	14	51	18	56	56	4	64	13	55	112	12	98	19	95	26	Prescott, f-d.....	
Carlan.....	6	8	3	6	4	4	8	3	3	4	7	10	8	7	4	9	3	10	6	1	8	7	7	8	7	10	13	Dickinson, r.....
Woodman.....	6	14	6	6	4	5	4	6	4	3	12	9	13	13	4	12	6	10	12	54	12	9	13	9	9	10	Maclay, d.....	
Lothrop.....	26	27	59	49	54	53	8	1	1	.....	20	20	40	20	22	58	1	16	17	26	63	14	62	16	31	45	Higgins, d.....	
Huson.....	13	11	28	24	25	26	4	4	5	3	17	10	26	12	8	28	8	2	7	.....	39	5	36	10	38	7	Darbee, r.....	
Forest.....	7	5	8	10	9	9	.....	.....	.....	.....	4	2	2	3	10	2	.....	10	2	.....	10	2	10	3	10	2	Gerrity, l-p.....	
Totals	1330	1466	1306	1285	1302	1266	829	411	444	459	1483	1062	1507	1293	1065	1613	428	1755	1149	381	2045	1006	1870	1224	1590	1200	Treasurer	
Pluralities	.....	136	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	548	.....	596	.....	.....	1039	.....	646	.....	.....	.....	Darbee, r.....	

PRECINCTS	County Attorney			Supt of Schools		Admin'r	Coroner	Sur-veyor	Auditor	County Commissioners				
	Hale, d...	Duncan, l-p	Smith, r.	Shelley, d...	Phelps, l-p					McGinnis, d...	Cameron, d.	Bonner, d	Scheffer, d	Dow, p
Missoula, 1.....	108	104	113	133	147	161	149	169	142	210	164	146	194	152
Missoula, 2.....	133	48	58	130	112	138	94	159	83	125	136	88	154	124
Missoula, 3.....	207	110	129	223	228	222	212	245	138	272	218	201	249	220
Missoula, 4.....	140	113	80	158	142	156	141	188	133	193	167	134	189	169
DeSmet .....	10	15	17	26	22	22	21	31	17	30	23	21	29	35
Arlee.....	8	2	26	19	22	9	27	12	25	31	10	25	10	6
Vermilion .....	4	5	8	4	13	3	14	5	12	16	43	30	5	3
Quartz .....	17	32	24	45	32	43	29	46	28	36	40	3	43	52
Bonita .....	11	47	20	52	34	43	31	60	22	45	44	28	41	34
Clinton .....	27	27	16	38	35	9	21	49	16	34	39	20	48	36
Carter .....	5	6	.....	11	1	10	.....	11	.....	4	9	.....	11	11
Carleton .....	11	23	12	24	22	19	25	25	20	28	21	22	22	17
Cold Spring..	25	19	28	44	28	31	36	44	26	45	35	31	35	36
Saltsee .....	14	13	8	28	9	26	7	29	5	12	26	8	28	26
Bonner .....	73	39	16	66	64	60	60	97	26	81	74	42	29	33
Potomac .....	24	33	8	39	23	39	18	56	9	17	41	16	38	43
Superior .....	22	74	22	77	46	84	25	88	24	39	72	32	90	90
Plains .....	73	85	51	130	92	115	15	131	72	104	137	70	117	106
Thompson .....	31	71	35	67	74	74	61	81	57	80	78	30	69	61
Frenchtown .....	38	41	22	75	30	75	23	78	25	33	70	21	74	97
Grass Valley .....	5	1	10	12	6	5	11	10	7	11	7	8	7	14
Heron .....	9	15	6	12	14	16	10	15	11	15	12	16	14	9
Lo Lo.....	15	53	17	53	34	48	33	58	23	55	43	35	42	38
Martina.....	6	7	1	8	7	11	4	13	2	4	11	3	11	12
St. Reigs .....	48	54	21	61	61	80	39	92	30	58	84	35	78	76
Trout Creek...	2	.....	2	3	2	3	2	4	1	4	1	4	.....	.....
Noxon .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Nine Mile .....	67	47	10	70	59	100	16	108	14	28	99	14	95	104
Carlton .....	3	8	5	11	6	10	9	6	10	9	6	7	7	4
Woodman .....	6	7	9	9	13	10	11	10	10	17	6	14	5	8
Lothrop .....	43	27	10	26	55	57	17	66	15	33	58	18	55	58
Husen .....	7	35	4	21	28	36	5	42	3	10	33	7	38	46
Forest .....	8	2	2	10	2	10	2	10	2	3	9	2	10	10
Totals .....	1200	1163	788	1765	1463	1751	1242	2011	1064	1682	1765	1175	1837	1733
Pluralities .....	37	.....	.....	302	.....	509	.....	977	.....	1681	590	.....	742	654

Totals  
Pluralities

## OFFICIAL ELECTION RETURNS FOR PARK COUNTY, FOR ELECTION HELD NOVEMBER 6, 1900.

PRECINCTS	President			Congress		Governor		Lieut. Governor		Sec'y State		Att'y General		State Treasurer		Auditor		State Supt.		Asso. Justice	
	President	Congress	Governor	Lieut. Governor	Sec'y State	Att'y General	State Treasurer	Auditor	State Supt.	Asso. Justice											
Livingston, 1st ward...	125	115	109	14	120	108	18	18	116	108	100	108	13	75	82	85	99	111	12	3	3
Livingston, 2d ward...	115	157	141	25	116	145	21	104	123	140	96	148	15	74	114	79	97	146	17	103	105
Livingston, 3d ward...	114	94	90	86	17	106	89	24	111	85	93	87	14	63	71	77	91	89	17	103	82
Cokedale	4	16	5	14	7	13	2	7	6	13	6	14	3	8	12	5	5	14	6	6	13
Fridley	41	32	37	28	1	48	25	2	35	28	34	23	1	26	20	23	36	29	2	36	26
Tom Miner Basin	12	13	10	14	1	13	11	2	12	12	12	13	1	9	11	6	12	13	1	11	14
Horr	42	39	39	35	5	49	24	9	43	30	39	30	3	38	22	16	42	29	4	39	32
Aldridge	77	87	42	70	38	50	63	48	54	73	70	41	77	33	28	66	45	70	35	50	69
Cinnabar	16	10	13	11	1	16	10	1	14	11	12	11	1	11	7	7	12	11	1	12	11
Gardner	21	26	15	23	1	25	21	1	20	25	18	26	1	14	21	7	18	23	1	19	24
Cooke	16	10	14	9	14	8	3	12	11	9	10	11	1	10	7	7	11	9	1	9	12
Bear Gulch	65	52	70	45	83	38	1	74	70	45	66	46	1	58	45	12	66	45	2	67	46
Chico	26	27	29	23	1	26	26	3	25	25	29	24	29	1	21	28	6	24	29	1	23
Cascade, South	10	12	9	11	1	11	13	1	8	10	13	9	3	2	6	13	9	12	1	8	15
Richland	26	6	20	7	4	20	6	18	5	22	8	20	9	3	16	8	18	8	9	19	10
Trail Creek	36	37	29	35	3	40	32	2	38	34	32	35	2	27	31	11	24	41	4	29	37
Mission, Lower	5	14	3	13	7	10	2	15	2	12	8	11	8	3	9	4	3	13	3	4	14
Mission, Upper	16	11	15	9	2	15	10	2	15	8	19	8	1	16	8	4	17	8	3	15	11
West Boulder	3	19	5	13	6	13	6	6	13	5	13	4	14	3	12	5	3	14	2	4	16
Contact	8	1	8	1	8	1	8	1	8	1	8	1	8	1	6	1	7	1	7	1	7
Hunters Hot Springs	13	8	10	8	4	13	7	2	11	8	11	8	2	10	5	7	11	7	2	11	8
Shields River	52	52	44	50	2	49	51	1	46	50	44	51	1	35	42	24	45	50	1	38	56
Cottonwood	10	7	11	3	8	10	3	7	10	10	7	10	3	5	5	10	7	10	3	7	10
Myersburg	9	19	7	18	8	18	1	8	18	7	18	12	10	4	16	8	6	18	4	21	10
Murphys	10	18	10	13	15	11	1	11	12	9	12	9	12	10	8	3	10	13	9	12	10
Muir	11	2	8	3	3	10	2	3	9	1	9	3	1	6	1	6	9	2	2	3	9
Lat.	4	4	3	4	5	3	1	4	3	2	4	2	4	1	5	2	1	4	1	3	4
Cascade, North	17	16	11	18	3	19	18	13	15	19	15	19	15	9	17	10	12	21	12	23	16
Total	904	907	750	822	129	907	783	157	811	882	816	751	846	101	587	630	742	840	117	725	886
Pluralities	.....	3	.....	72	121	.....	.....	.....	66	.....	.....	.....	95	.....	.....	93	.....	98	.....	.....	10



## PARK COUNTY—Continued.

PRECINCTS.	Judge 6th Dist		State Senator		Members of Legislature				Treasurer		Sheriff	Assessor	Cl'k & Rec'y		Clerk Dist. Ct	County Atty	Supt
Livingston, 1st ward.....	110	138	130	106	14	101	114	98	100								Mrs. Colvin, d... ..
Livingston, 2d ward.....	120	152	118	138	20	94	112	141	117								Wilson, r... ..
Livingston, 3d ward.....	118	105	116	141	20	79	97	84	73								Miller, s.-r... ..
Cokedale .....	4	17	5	14	1	6	5	8	10								Davis, r... ..
Fridley .....	32	38	53	21	2	33	25	16	19								Bailey, d... ..
Tom Miner Basin .....	14	12	17	8	1	8	10	9	10								Angus, r ... ..
Horr .....	45	31	15	27	2	29	43	55	25								Robinson, d... ..
Aldridge .....	76	78	70	67	19	25	47	69	58								Daniels, r... ..
Cinnabar .....	12	13	20	5	...	16	16	6	7								Proffitt, d... ..
Gardiner .....	14	27	30	14	...	13	13	18	27								Robertson, r... ..
Cooke .....	18	9	18	10	...	3	13	4	9								Beley, d... ..
Bear Gulch .....	28	90	73	45	1	62	61	40	50								Gustine, ind.....
Chico .....	35	23	32	25	1	25	19	25	27								Young, s.-r... ..
Cascade, South .....	11	14	15	10	...	8	10	9	12								Chambers, r .....
Richland .....	16	14	17	10	4	17	13	7	6								Roth, d... ..
Trail Creek .....	32	38	40	27	6	31	36	25	27								Ferte, p... ..
Mission, Lower .....	4	14	9	8	2	4	7	9	6								Orr, s.-r... ..
Mission, Upper .....	8	21	20	7	2	15	15	11	11								Wetzstein, s.-r .....
West Boulder .....	5	17	20	3	...	14	15	4	4								Phelps, r... ..
Contact .....	6	2	8	1	...	7	7	...	...								Stark, r... ..
Hunters Hot Springs .....	20	6	19	5	3	14	12	5	5								Swindlehurst, d... ..
Shields River .....	29	78	56	50	1	57	42	40	38								Myers, d... ..
Cottonwood .....	9	12	6	14	1	8	4	9	9								Kelly, i.-d... ..
Myersburg .....	5	20	5	20	...	9	8	15	14								Thompson, r... ..
Murphreys .....	7	18	15	12	...	14	12	11	10								Conrow, r.....
Muir .....	10	3	9	1	3	9	9	1	...								Poorman, r... ..
Lat... ..	2	6	5	4	...	7	3	3	2								Henry, d... ..
Cascade, North .....	10	26	19	17	2	14	12	22	14								
Total .....	799	1022	990	760	105	732	790	714	691								
Pluralities .....	...	223	230	...	...	18	76	...	...								

## PARK COUNTY—Continued.

[illegible]

OFFICIAL ELECTION RETURNS FOR RAVALLI COUNTY, FOR ELECTION HELD NOVEMBER 6, 1900.

PRECINCTS.	President		Congress	Governor	Lieut. Governor	Secretary of State		Att'y General	Treasurer	Auditor	Superintendent of Schools	Assoc. Justice Supreme Court	Judge 4th Dist																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
	McKinley, r.	Bryan, d.	Edwards, f.-p.	Murray, r.	Kelley, i.-d.	Toole, f.-d.	Folsom, r.	Hogan, i.-d.	Higgins, f.-d.	Bennet, r.	Marion, i.-d.	Hays, f.-d.	Yoder, r.	Donovan, f.-p.	Porter, r.	Stewart, i.-d.	Barret, f.-d.	Edwards, r.	Livingston, i.-d	Calderhead, f.-p	Proctor, r.	McLean, i.-d.	Welch, f.-l.	Harmon, r.	Leamy, i.-d.	Milburn, f.-d.	Von Tobel, r.	Word, i.-d.	Woody, d.	Webster, r.																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
Sula .....	7	21	5	19	3	16	17	4	5	17	4	6	19	20	17	8	4	11	19	11	7	4	19	18	4	6	19	20	7	20																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
Overwhich .....	23	63	12	20	8	17	17	4	12	19	8	11	19	22	19	19	11	12	11	9	22	4	19	18	11	11	19	22	7	20																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
Darby .....	83	44	58	34	54	54	77	58	44	60	32	41	57	35	43	59	32	42	58	32	38	4	19	18	11	11	19	22	7	20																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
Grantsdale .....	126	75	61	71	55	77	63	55	(9)	66	54	16	64	59	67	53	61	66	50	58	72	4	19	18	11	11	19	22	7	20																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
Hamilton, 5 .....	146	116	54	103	97	77	94	89	68	91	88	149	100	56	99	94	55	10	91	55	58	104	51	60	69	52	57	64	50	58	72																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
Hamilton, 6 .....	177	122	95	103	78	135	86	79	110	98	77	173	102	91	107	74	96	139	73	91	104	79	89	103	71	98	99	93	55	146	146																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
Corvallis .....	100	115	78	103	104	103	10	81	16	20	104	104	80	107	20	84	108	19	73	91	104	79	89	103	71	98	99	93	55	146	146																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
Victor .....	135	102	105	104	15	140	80	17	123	13	20	120	95	105	104	15	107	104	15	103	93	16	102	101	15	103	90	18	81	118	118																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
Stevensville .....	172	186	159	134	16	189	173	13	172	174	15	168	182	147	18	15	156	180	13	149	183	15	139	19	13	149	19	13	149	19	13																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
Florence .....	66	56	43	56	22	65	41	17	56	47	18	67	51	46	53	20	43	53	22	41	53	22	46	53	22	41	53	22	46	53	22	46																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
Eight Mile .....	8	20	5	21	2	10	18	2	9	1	3	6	21	5	21	2	4	22	1	9	9	20	1	4	21	1	7	18	1	10	18	1																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
Totals ..	1052	892	661	847	352	874	748	334	762	781	335	1010	817	606	839	336	663	845	329	653	823	340	625	849	333	634	808	343	551	996	551	996																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
Pluralities .....	160	.....	186	.....	19	.....	193	.....	182	.....	170	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

## RAVALLI COUNTY—Continued.

PRECINCTS	Members Legislature										Sheriff		Clerk Court		Treas.		Clerk and Record		Assessor		Co. Att'y.		Supt. Schools		Admin- istrator		Cor.		
	Baggs, r...	Conner, r...	Flowers, l-p	Landrum, l-p	Hatch, d	See, d...	Faulds, ind..	Watts, r...	Parmenter, l-p	Stephens, d...	Cone, r...	Fitzgerald, d...	Buck, r	Lenehan,d	Smart, r	Irvine, d...	Johnson, r...	Lear, l...	Fowler, d...	Baker, r...	Droffen, d...	Fisher, r...	Ostermeyer, p...	Million, d...	Miser, r...	Baldwin, p...	McCorkle, d	Cunningham, r...	Griffith, l...
Sula	13	13	7	6	8	6	19	3	8	23	5	18	10	26	4	24	1	4	25	3	12	17	1	14	8	6	18	6	
Overwhich	23	17	4	7	11	16	12	25	6	26	14	24	15	25	14	32	4	5	29	10	10	8	5	21	8	10	21	13	
Darby	41	61	48	55	30	38	72	19	51	83	56	77	46	97	36	89	25	2	96	40	38	70	35	51	47	29	59	39	
Grantsdale	49	46	37	46	77	96	78	14	106	100	96	90	58	97	84	90	30	69	129	68	64	65	88	52	44	76	58	49	
Hamilton, 5	85	80	53	58	59	113	2	10	36	164	99	106	137	162	87	119	22	78	141	103	36	152	71	9	37	105	100	63	
Hamilton, 6	81	70	97	94	99	91	1	128	43	193	106	139	139	185	101	177	38	75	197	87	41	192	68	74	53	19	92	108	
Corvallis	96	94	93	82	28	26	123	44	64	136	77	139	44	151	37	137	66	25	163	34	73	96	51	103	56	47	43	76	
Victor	96	94	107	18	33	29	5	112	75	122	102	133	47	150	51	114	60	65	135	62	65	125	46	89	121	67	96	87	
Stevensville	187	147	136	153	43	30	231	56	96	205	147	302	47	289	51	247	82	38	260	71	182	54	143	222	97	41	194	19	
Florence	44	41	41	45	27	29	47	36	40	67	53	81	32	80	31	83	18	19	77	35	44	31	48	57	27	28	55	35	
Eight Mile	16	20	5	5	4	2	2	20	1	19	11	23	5	24	4	24	5	1	22	6	15	1	13	19	8	20	6		
Totals	731	683	648	660	476	33	949	351	69	1138	766	1132	65	1286	500	1158	351	40	1265	519	562	830	569	791	467	498	806	582	
Pluralities	71	23					270			372		627		786		754			746			261		293			224		



## OFFICIAL ELECTION RETURNS FOR SILVER BOW COUNTY, FOR ELECTION HELD NOVEMBER 6, 1900.

PRECINCTS	Presidential Electors					Congress	Governor		Lieutenant Governor	Secretary of State	Att'y General		Treasurer	Auditor	Superintendent of Schools																	
	Wilson, r.	Kessler, r.	McCormick, r.	Morris, d.	O'Shea, d.		Leiser, d.	Kelley, i.-d.			Edwards, f.-p.	Murray, r.				Polsom, r.	Toole, f.-d.	Hogan, i.-d.	Bennett, r.	Higgins, f.-d.	Marion, i.-d.	Yoder, r.	Hays, i. and f.-d.	Porter, r.	Donovan, f.-p.	Stewart, i.-d.	Edwards, r.	Barret, f.-d.	Livingston, i.-d.	Proctor, r.	Calderhead, f.-p.	McLean, i.-d.
1.....	97	97	95	193	189	188	119	75	83	85	87	104	86	81	111	84	191	88	79	110	110	88	78	111	86	80	111	84	79	113		
2.....	62	62	62	158	156	156	78	99	42	47	104	73	47	104	71	51	168	45	102	69	47	100	69	50	97	72	100	69	50	97	72	
3.....	31	31	30	201	201	197	114	82	27	29	90	109	30	83	108	30	187	27	83	105	84	105	84	105	27	83	104	32	9	111		
4.....	98	99	95	371	368	367	269	114	83	79	131	270	80	123	252	84	339	78	120	253	80	116	255	77	119	244	80	115	255	77		
5.....	146	147	146	321	319	317	235	108	119	122	120	232	116	101	223	120	330	120	106	225	115	111	222	111	108	222	122	105	222	105	222	
6.....	41	40	41	189	188	187	121	82	27	31	31	121	29	84	115	30	196	3	84	115	28	84	115	28	83	118	5	73	296	5	74	295
7.....	49	46	47	253	257	252	206	67	35	39	72	199	33	71	186	38	253	38	71	87	37	70	189	35	71	187	38	71	185	62	81	
8.....	109	111	107	133	131	134	61	94	77	69	115	58	72	109	54	86	151	10	97	54	63	118	52	78	98	56	81	88	62	81	88	62
9.....	7	7	7	375	372	372	310	71	5	5	74	310	5	74	293	6	339	5	74	297	5	71	295	5	71	296	5	74	295	5	74	295
10.....	130	130	129	522	523	520	292	269	92	88	293	292	95	292	240	101	515	100	278	263	93	281	293	92	271	260	10	266	263	94	263	94
11.....	151	149	149	484	479	477	203	322	110	106	357	187	111	346	180	113	520	117	336	171	109	351	172	115	33	173	19	325	194	325	194	
12.....	108	109	107	574	569	570	334	69	85	86	280	322	88	240	315	92	589	88	281	293	88	278	297	98	275	293	86	265	312	86	265	312
13.....	76	77	76	280	279	278	173	119	66	67	126	166	65	124	151	65	286	66	127	156	64	125	156	63	124	155	65	123	159	65	123	159
14.....	95	93	93	635	636	632	301	352	81	84	361	300	83	15	291	87	637	85	355	282	85	356	240	84	356	290	85	351	24	85	351	24
15.....	58	67	67	561	560	559	234	252	49	47	266	334	50	248	316	54	570	51	254	316	47	256	316	47	256	316	50	250	317	50	250	317
16.....	129	132	130	353	349	353	117	261	88	90	289	100	87	248	99	92	382	95	270	100	87	288	99	9	271	94	94	265	112	94	265	112
17.....	200	201	200	343	340	342	109	267	135	142	303	97	138	300	91	119	381	144	288	95	135	296	99	15	248	94	118	277	109	94	118	277
18.....	89	88	88	174	173	172	56	141	60	64	154	45	62	151	41	74	181	68	138	47	54	156	46	58	143	48	58	127	70	48	58	127
19.....	166	165	165	615	609	608	167	520	10	128	380	170	132	478	100	134	635	132	476	156	134	473	157	134	474	158	133	472	160	133	472	160
20.....	164	164	163	518	511	510	179	359	118	116	381	176	118	376	166	128	511	139	370	162	113	379	166	118	376	162	117	363	173	117	363	173
21.....	182	182	182	638	638	638	156	505	146	139	557	143	140	532	138	152	655	146	516	143	140	536	140	149	506	145	150	500	151	150	500	151
22.....	89	89	89	251	251	250	93	180	67	67	200	78	67	197	77	73	262	74	191	117	109	310	73	65	192	75	78	190	83	78	190	83
23.....	139	140	140	442	433	433	128	328	107	107	357	127	106	294	121	114	461	111	341	117	109	312	124	110	349	114	115	339	133	115	339	133
24.....	51	52	51	135	133	133	19	114	44	45	122	19	45	115	19	47	132	41	120	19	41	120	19	43	119	18	43	119	17	43	119	17
25.....	142	140	139	356	353	352	89	307	10	106	310	87	103	301	87	119	370	108	297	83	98	297	83	10	29	82	106	289	84	106	289	84

## SILVER BOW COUNTY—Continued.

Precincts	Presidential Electors			Congress		Governor		Lieutenant Governor		Secretary of State		Atty General		Treasurer		Auditor		Superintendent of Schools											
	Wilson, r.....	Kessler, r.....	McCormick, r.....	Morris, d.....	O'Shea, d.....	Leiser, d.....	Kelley, i.-d.....	Edwards, f.-p.....	Murray, r.....	Folsom, r.....	Toole, f.-d.....	Hogan, i.-d.....	Bennett, r.....	Higgins, f.-d.....	Marion, i.-d.....	Yoder, r.....	Hays, i. and f.-d.....	Porter, r.....	Donovan, f.-p.....	Stewart, i.-d.....	Edwards, r.....	Barret, f.-d.....	Livingston, i.-d.....	Proctor, r.....	Calderhead, f.-p.....	McLean, i.-d.....	Harmon, r.....	Welsh, f.-l.....	Leamy, i.-d.....
36	196	199	198	502	497	498	116	439	133	125	473	106	133	454	99	152	529	144	438	95	130	459	93	128	451	98	140	438	106
27	103	101	101	320	317	318	69	312	74	69	327	67	70	323	61	82	372	77	316	63	73	315	67	71	320	61	81	310	68
28	232	232	229	229	230	230	22	235	205	199	218	13	58	102	18	199	260	198	241	18	198	241	18	198	241	19	203	18	19
29	65	65	65	108	108	108	13	15	51	52	106	13	58	102	12	55	116	56	103	12	55	105	12	55	104	12	56	103	12
30	16	16	16	84	84	84	7	80	12	13	80	7	12	80	7	12	80	12	80	7	17	78	9	14	79	17	14	79	17
31	121	124	122	211	210	208	41	190	91	92	196	40	92	194	37	93	227	97	191	36	97	188	37	90	194	36	96	186	37
32	82	83	82	190	190	190	27	175	19	46	189	26	49	181	27	50	197	46	181	27	48	181	20	47	179	22	48	180	29
33	80	83	81	247	242	244	16	239	68	64	251	11	68	181	8	71	256	67	247	8	67	270	9	66	251	9	68	270	9
34	51	52	52	103	101	100	30	78	41	44	89	26	41	23	28	40	115	40	88	23	41	88	24	39	39	25	41	79	31
35	8	8	8	46	45	45	8	37	1	4	38	8	4	36	8	5	44	5	35	8	7	36	8	5	36	8	5	36	8
36	2	2	2	30	29	29	14	15	4	5	17	13	6	15	13	4	29	5	16	12	5	16	13	5	17	10	6	15	11
37	37	37	37	16	16	16	1	14	3	3	14	1	3	14	1	3	15	3	14	1	3	13	1	3	13	1	3	14	1
38	13	14	13	20	19	20	6	10	11	13	15	4	14	11	3	15	16	13	12	3	12	14	4	14	12	3	13	13	4
39	31	30	30	22	22	22	6	21	22	23	23	4	25	20	4	23	26	24	21	4	24	20	4	22	21	4	22	20	4
40	6	6	6	25	25	25	8	17	4	18	9	4	19	7	4	27	4	19	7	4	18	6	4	20	6	4	18	7	18
41	41	41	41	52	45	45	21	23	5	6	24	23	4	24	23	5	44	4	23	21	4	23	21	4	22	4	22	20	20
42	8	8	8	28	27	27	10	22	6	5	28	10	5	25	8	8	30	5	22	8	4	25	8	4	22	8	6	22	8
43	8	7	7	26	26	25	11	16	6	8	15	10	7	13	11	8	14	9	14	10	16	84	11	16	35	10	16	36	9
44	24	24	24	40	39	39	11	32	18	17	39	10	17	37	9	16	45	16	36	10	16	84	11	16	35	10	16	36	9
45	3	3	3	22	22	21	3	20	...	...	20	3	...	20	3	1	22	...	20	3	...	20	3	...	20	3	1	18	4
46	27	27	7	15	14	14	4	12	35	23	15	2	24	15	2	25	14	27	10	2	26	10	2	26	11	2	26	10	3
47	6	6	6	13	13	13	3	9	6	7	9	3	6	7	9	3	13	8	9	3	7	10	3	7	10	3	7	10	3
48	48	48	48	6	6	6	7	10	10	10	10	1	8	8	1	8	2	1	8	2	1	8	2	1	8	2	1	7	1
49	1	1	1	11	11	10	1	1	1	1	1	1	1	1	1	1	501	136	429	74	121	493	75	119	437	74	127	429	80
50	166	166	167	472	470	470	87	415	125	121	432	83	120	433	76	125	501	136	429	74	121	493	75	119	437	74	127	429	80
51	7	7	7	194	194	193	124	76	7	6	81	120	6	81	116	6	197	6	79	117	77	117	6	78	118	6	78	118	6
52	3873	3877	3882	12101	12011	11992	4923	7566	2927	2938	8468	4730	2961	8199	4527	3134	12573	3066	8110	4456	2917	8254	4489	2978	8155	4471	3062	921	4614
Totals																													

## SILVER BOW COUNTY—Continued.

PRECINCTS	Associate Justice			Sheriff		Clerk and Recorder		Treasurer		Cl'k of Court		Assessor		County Att'y		County Commissioners							Superintendent of Schools											
	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.												
1.	81	81	111	78	86	124	69	100	113	73	57	114	82	74	122	73	87	117	76	88	111	73	103	96	47	50	51	66	108	119	111	73	97	111
2.	46	102	72	98	30	117	87	35	108	83	35	106	81	30	118	87	49	71	91	53	68	13	103	96	47	50	51	66	108	119	111	73	97	111
3.	28	86	109	90	30	117	87	35	108	83	35	106	81	30	118	87	49	71	91	53	68	13	103	96	47	50	51	66	108	119	111	73	97	111
4.	73	121	224	119	114	236	91	128	221	101	128	227	123	110	126	22	111	219	111	9	23	118	124	118	95	80	82	242	222	220	221	93	141	235
5.	112	110	224	119	114	236	91	128	221	101	128	227	123	110	126	22	111	219	111	9	23	118	124	118	95	80	82	242	222	220	221	93	141	235
6.	29	83	116	89	29	119	82	29	116	84	30	116	86	23	120	90	25	113	78	33	114	82	108	100	146	121	222	220	221	93	141	235		
7.	34	70	189	72	39	199	64	44	193	70	37	126	75	31	194	70	32	195	68	39	187	74	73	65	46	38	38	185	186	181	69	42	191	
8.	64	105	60	100	83	61	120	64	59	96	89	59	106	73	62	117	66	61	97	67	71	105	91	90	94	86	86	54	54	56	89	47	192	
9.	5	73	295	80	4	299	74	5	211	73	5	295	68	4	297	76	4	290	73	4	292	85	86	74	5	5	5	278	287	280	77	5	279	
10.	84	276	277	300	108	258	264	105	275	268	15	271	259	88	287	272	97	262	267	101	262	275	290	272	121	101	101	235	267	271	233	126	270	
11.	98	332	138	342	120	192	266	112	201	307	134	194	379	123	206	335	105	187	173	203	331	323	321	129	125	126	172	184	185	321	118	191	233	
12.	84	275	305	274	19	312	25	89	308	277	93	307	257	88	314	263	86	305	25	82	249	269	269	262	87	86	90	29	29	29	29	29	29	
13.	61	127	160	135	64	160	122	66	158	125	63	162	120	62	167	127	61	159	12	63	156	132	125	129	67	63	63	149	163	153	122	72	157	
14.	82	351	281	352	87	291	215	91	240	344	87	293	345	81	283	356	80	279	33	81	23	355	351	350	82	79	80	275	287	276	355	51	293	
15.	45	253	281	251	53	317	252	49	317	252	63	316	250	51	317	254	51	308	255	50	305	305	302	251	50	50	305	306	302	251	50	305	305	
16.	79	277	191	274	105	112	277	87	122	262	93	113	265	87	122	262	93	113	265	87	122	262	265	263	81	84	112	115	116	218	190	190	190	
17.	121	289	105	283	158	104	287	140	105	283	165	106	262	150	121	291	136	110	121	144	122	272	273	267	164	148	157	96	97	104	29	97	97	
18.	151	444	60	140	67	57	140	50	65	117	84	57	121	74	65	136	57	61	58	66	126	124	119	79	67	79	56	53	59	17	79	52	52	
19.	127	477	159	474	146	169	469	133	121	461	138	167	465	134	165	464	133	161	467	138	159	455	461	461	144	140	140	146	161	152	45	147	156	
20.	112	380	168	366	128	177	368	112	178	369	128	183	368	114	364	361	111	358	358	121	139	359	353	351	121	173	180	171	171	171	171	171	171	
21.	142	514	148	517	141	172	517	141	172	517	141	172	517	141	172	517	141	172	517	141	172	517	141	172	517	141	172	517	141	172	517	141	172	517
22.	58	200	80	181	82	82	181	73	83	176	81	82	181	74	87	185	74	76	156	66	2	190	187	182	70	69	70	82	81	79	175	92	118	118
23.	104	351	117	341	121	127	331	113	127	331	113	127	331	113	127	331	113	127	331	113	127	331	113	127	331	113	127	331	113	127	331	113	127	331
24.	44	115	111	111	51	18	113	44	16	107	53	17	108	49	22	112	43	18	114	41	21	110	110	104	47	48	44	18	19	21	101	132	122	
25.	103	299	86	287	123	90	288	146	92	276	123	91	283	115	97	28	109	59	27	105	97	283	281	277	120	111	114	83	80	83	280	123	78	78
26.	135	453	100	447	146	137	456	137	456	137	456	137	456	137	456	137	456	137	456	137	456	137	456	137	456	137	456	137	456	137	456	137	456	137
27.	72	318	657	311	91	68	311	73	71	30	91	62	311	73	68	321	75	61	303	77	69	320	313	307	79	84	79	64	61	62	298	15	45	45

Miss Downey, i.....  
Newill, r.....  
Miss Mullins, f.....

Copenharve, i.....  
Cronin, i-d.....  
McArthur, i-d.....  
Davidson, r.....  
Elvers, r.....  
Reynolds, r.....  
Hagerty, f.....  
Peoples, f.....

Clark, f.....  
Lamb, i-d.....  
Kohl, r.....  
Breen, f.....  
Laurandean, i-d.....  
Lyford, r.....  
Brown, f.....  
Leonard, i-d.....  
Lloyd, r.....  
Roberts, f.....

Holland, i-d.....  
Cook, r.....  
Maher, f.....  
Moran, i-d.....  
Ford, r.....  
Weston, f.....  
Murphy, i-d.....  
Young, r.....  
Furey, f.....  
Word, i-d.....  
Milburn, f-d.....  
Von Tobel, r.....





## SILVER BOW COUNTY—Continued.

[illegible]

## SEVENTH ANNUAL REPORT OF BUREAU

## SILVER BOW COUNTY—Continued.

PRECINCTS	Auditor		Coroner		Administ'r		Surveyor		Judges 2d Judicial District		Members of the Legislature	
Sullivan, i.-d. ....	62	19	11	7	36	22	11	11	67	61	61	61
Regan, i.-d. ....	62	19	11	7	36	22	11	11	67	61	61	61
Boyd, i.-d. ....	62	19	11	7	36	22	11	11	67	61	61	61
Gilmartin, i.-d. ....	62	19	11	7	36	22	11	11	67	61	61	61
Boom, i.-d. ....	62	19	11	7	36	22	11	11	67	61	61	61
Sullivan, f. ....	62	19	11	7	36	22	11	11	67	61	61	61
Lannin, f. ....	62	19	11	7	36	22	11	11	67	61	61	61
Quinn, f. ....	62	19	11	7	36	22	11	11	67	61	61	61
Dee, f. ....	62	19	11	7	36	22	11	11	67	61	61	61
Axtell, f. ....	62	19	11	7	36	22	11	11	67	61	61	61
Pelletier, f. ....	62	19	11	7	36	22	11	11	67	61	61	61
Ferry, f. ....	62	19	11	7	36	22	11	11	67	61	61	61
Meunier, f. ....	62	19	11	7	36	22	11	11	67	61	61	61
Gilchrist, f. ....	62	19	11	7	36	22	11	11	67	61	61	61
Kilgallan, f. ....	62	19	11	7	36	22	11	11	67	61	61	61
Corbett, f. ....	62	19	11	7	36	22	11	11	67	61	61	61
MacGinnis, f. ....	62	19	11	7	36	22	11	11	67	61	61	61
Bacorn, i.-d. ....	62	19	11	7	36	22	11	11	67	61	61	61
Connolly, i.-d. ....	62	19	11	7	36	22	11	11	67	61	61	61
Clancy, f. ....	62	19	11	7	36	22	11	11	67	61	61	61
Harney, f. ....	62	19	11	7	36	22	11	11	67	61	61	61
Pennington, i.-d. ....	62	19	11	7	36	22	11	11	67	61	61	61
Baker, r. ....	62	19	11	7	36	22	11	11	67	61	61	61
Monroe, f. ....	62	19	11	7	36	22	11	11	67	61	61	61
O'Connor, i.-d. ....	62	19	11	7	36	22	11	11	67	61	61	61
Chauvin, r. ....	62	19	11	7	36	22	11	11	67	61	61	61
Collins, f. ....	62	19	11	7	36	22	11	11	67	61	61	61
Egan, i.-d. ....	62	19	11	7	36	22	11	11	67	61	61	61
Lomas, r. ....	62	19	11	7	36	22	11	11	67	61	61	61
Johnston, f. ....	62	19	11	7	36	22	11	11	67	61	61	61
Page, i.-d. ....	62	19	11	7	36	22	11	11	67	61	61	61
Strasberger, r. ....	62	19	11	7	36	22	11	11	67	61	61	61
Crossman, f. ....	62	19	11	7	36	22	11	11	67	61	61	61

## SILVER BOW COUNTY—Continued.

## Members of the Legislature

PRECINCTS	Noon, l-d, . . . . .	Seaton, l-d, . . . . .	O'Farrell, l-d, . . . . .	Fulton, l-d, . . . . .	Alley, l-d, . . . . .	Hughes, l-d, . . . . .	Winchell, l-d, . . . . .	Miles, r, . . . . .	Dyer, r, . . . . .	Ellingwood, r, . . . . .	Blinn, r, . . . . .	Giard, r, . . . . .	Berger, r, . . . . .	Davis, r, . . . . .	Clark, r, . . . . .	Driscoll, r, . . . . .	Pascoe, r, . . . . .	Hodge, r, . . . . .	Morley, r, . . . . .
1	111	111	112	111	111	112	109	72	75	73	73	73	71	73	72	73	75	77	72
2	71	66	67	69	68	66	64	42	41	41	42	44	40	41	45	43	41	49	41
3	106	103	106	105	100	102	98	28	28	29	30	28	27	27	28	28	29	33	26
4	248	247	251	250	243	218	238	68	68	72	71	74	72	69	69	77	71	73	68
5	224	223	229	227	217	225	220	113	115	111	112	112	110	111	112	114	116	123	107
6	115	115	120	118	114	116	114	21	22	22	23	22	21	21	22	24	23	22	21
7	186	188	191	185	183	184	174	38	40	36	36	37	35	37	36	40	36	42	36
8	62	58	56	61	59	55	54	71	72	73	72	71	68	71	72	68	72	69	68
9	290	293	293	290	287	288	289	5	5	6	6	5	5	5	5	7	5	5	5
10	261	257	264	263	290	261	252	87	86	85	83	81	83	83	83	87	85	87	86
11	187	173	177	191	173	171	172	94	95	99	94	104	99	102	96	100	101	93	102
12	293	293	293	301	290	301	287	79	81	84	82	81	81	81	79	93	83	80	84
13	157	156	157	156	155	155	61	62	62	62	65	60	62	62	60	65	61	59	61
14	282	283	284	281	276	281	275	85	82	84	85	83	84	85	85	97	87	86	84
15	307	306	306	307	305	306	305	47	46	46	48	47	46	48	45	53	47	48	46
16	107	100	105	119	106	105	103	74	75	85	83	86	77	83	80	82	82	76	87
17	96	91	95	99	91	96	91	121	117	122	119	129	124	126	122	125	124	119	125
18	50	42	47	52	42	43	48	57	57	64	58	61	59	59	64	56	60	56	64
19	160	160	157	162	158	166	159	118	119	120	121	126	118	119	121	123	125	118	121
20	169	169	171	179	170	175	165	109	105	110	107	112	105	106	105	104	110	109	109
21	158	147	155	188	153	153	147	136	132	139	131	141	131	137	131	126	137	128	136
22	84	79	81	88	74	79	76	59	58	68	60	70	64	62	65	57	65	58	64
23	121	119	120	119	122	125	119	98	98	103	97	99	100	102	99	99	103	98	96
24	15	16	16	17	18	16	17	42	42	43	49	45	42	44	45	41	43	42	41
25	90	87	85	86	84	87	86	98	91	101	97	99	101	99	100	97	103	98	96
26	105	102	103	105	105	107	104	107	103	125	117	122	116	115	115	115	119	110	115
27	63	66	64	61	60	64	60	65	65	67	68	68	63	68	67	66	72	65	65
28	18	19	19	20	18	19	19	194	194	195	196	195	196	197	196	196	194	194	194
29	11	11	11	11	11	11	11	52	54	54	54	53	54	53	54	52	53	53	54
30	7	7	7	7	7	7	7	12	12	12	12	12	12	12	12	13	12	12	12
31	39	40	38	40	36	36	36	89	90	87	86	87	86	86	83	85	88	91	88
32	22	21	22	21	23	25	21	48	44	46	56	45	42	44	43	44	47	48	43
33	11	9	11	10	12	11	10	60	61	64	65	63	63	64	63	64	66	64	63
34	35	25	29	31	25	30	25	35	34	35	37	35	33	34	35	35	34	35	35
35	7	7	7	7	6	7	6	2	2	2	2	3	3	2	4	2	2	2	2
36	9	9	9	9	9	9	9	6	5	5	5	6	6	6	6	6	6	6	6
37	1	1	1	1	1	1	1	3	3	3	3	4	3	3	3	3	3	3	3
38	3	4	4	4	3	3	3	16	12	14	12	12	11	12	11	14	11	14	12
39	4	4	4	3	5	4	4	22	23	23	20	21	20	21	22	21	24	21	21
40	7	7	7	7	7	8	7	10	5	5	5	5	4	4	4	4	4	4	4
41	23	28	23	20	20	20	20	4	4	5	5	4	4	4	4	5	4	4	4
42	8	8	8	8	8	8	7	5	8	7	7	7	7	7	8	7	8	7	7
43	9	9	9	9	9	9	9	5	5	5	5	5	5	5	5	5	5	5	5
44	10	10	10	10	10	10	9	16	16	16	16	16	16	16	16	15	16	16	16
45	4	3	3	3	2	3	2	1	1	1	2	1	1	1	1	1	1	1	1
46	1	1	1	1	1	1	1	25	25	25	25	25	25	25	25	25	25	25	25
47	4	4	4	4	5	3	4	6	5	5	5	5	5	5	5	5	4	5	6
48	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	3
49	72	71	76	76	77	74	71	102	102	107	107	102	103	106	103	101	105	103	104
50	120	117	120	118	118	118	115	6	7	6	6	6	7	6	7	6	6	6	7
Totals	4542	4460	4537	4592	4434	4506	4385	2715	2705	2793	2756	2797	2710	2750	2737	2765	2794	2739	2741

## OFFICIAL ELECTION RETURNS FOR SWEET GRASS COUNTY, FOR ELECTION HELD NOVEMBER 6, 1900.

PRECINCTS	President			Congress			Governor			Lieut. Governor			Secy of State			Att'y General			Treasurer			Auditor			Superintendent of Schools			Assoc. Justice Supreme Court		
	McKinley, r.....	Bryan, f.-d.....	Edwards, f.-d. . .	Murray, r.....	Kelley, i.-d.....	Toole, f.-d. . . . .	Folsom, r.....	Hogan, i.-d.....	Higgins, f.-d.....	Bennett, r.....	Marion, i.-d.....	Hays, i. and f.-d..	Yoder, r.....	Donovan, f.-p. . .	Porter, r.....	Stewart, i.-d. . . .	Barret, f.-d. . . . .	Edwards, r. . . . .	Livingston, i.-d ..	Calderhead, -f.p..	Proctor, r. . . . .	McLean, i.-d.....	Welsh, f.-l.....	Harmon, r.....	Leamy, i.d.....	Milburn, f.-d....	Von Tobel, r....	Word, i.-d.....		
Big Timber . . . . .	176	121	114	172	4	128	171	6	118	171	5	121	174	114	177	3	111	175	10	111	176	3	103	119	15	130	163	6		
McVelle . . . . .	73	15	14	73	...	18	72	...	15	72	...	15	72	15	74	...	15	73	1	15	74	...	15	74	...	18	70	...		
Fish Creek . . . . .	14	3	4	13	...	4	13	...	3	13	...	3	13	15	14	...	3	14	...	3	13	...	3	13	...	3	12	1		
Grey Cliff . . . . .	23	26	24	19	1	32	16	1	24	19	2	28	21	26	20	3	27	20	2	27	21	2	27	21	27	20	27	20		
Howie . . . . .	28	8	9	29	...	11	28	...	10	28	...	10	29	9	29	...	9	27	1	9	30	...	9	28	9	28	10	27		
McLeod . . . . .	33	27	26	31	...	11	32	...	2	32	...	26	32	23	32	...	26	32	...	25	33	...	27	33	27	33	27	33		
Springdale . . . . .	16	11	11	15	...	11	15	...	10	15	1	11	15	10	15	1	10	15	1	10	15	1	10	15	10	15	11	15		
Wormser . . . . .	33	8	8	33	...	12	32	...	8	33	...	9	32	7	31	...	8	31	1	8	33	...	7	34	7	34	8	33		
Upper Stillwater . . . . .	8	12	13	8	...	12	8	...	11	8	...	11	8	12	8	...	10	8	1	12	8	...	11	9	11	9	12	8		
Lower Stillwater . . . . .	12	13	14	12	...	16	10	1	16	10	...	16	10	15	12	...	17	9	...	15	12	...	17	10	17	10	16	11		
Cowles . . . . .	4	9	8	5	...	8	5	...	8	5	...	8	5	8	5	...	7	5	...	8	4	...	8	5	8	5	8	5		
Blakely . . . . .	2	4	4	1	...	4	2	...	4	2	...	4	2	4	2	...	4	2	...	4	2	...	4	2	4	2	4	2		
American Fork . . . . .	18	8	7	16	...	11	14	...	8	15	7	15	7	15	7	...	16	16	...	7	17	...	8	17	8	17	7	16		
Merrill . . . . .	20	22	17	20	3	20	17	4	19	18	4	21	19	14	23	4	17	19	5	15	20	4	15	23	18	21	2	2		
Total . . . . .	460	287	276	447	8	365	435	12	283	442	12	391	447	269	760	12	270	446	22	239	458	10	264	463	289	439	10	150		
Pluralities . . . . .	13	...	...	171	...	...	130	...	...	159	...	...	56	...	191	...	...	176	...	...	189	...	...	199	...	...	...	...		



SWEET GRASS COUNTY—Continued.

[illegible]



## TETON COUNTY—Continued.

PRECINCTS	Members Legisl're	Cl'k of Court	Sheriff	Treas'r	Clerk & Record'r	Assess'r	County Attorn'y	Supt' of Schools	Adm'n	Coroner	Surveyor											
Choteau .....	101	122	81	145	112	114	99	128	88	137	103	123	101	126	104	122	107	115	85	129	102	123
Burton .....	18	42	4	56	19	41	8	52	9	50	14	47	22	38	22	38	12	46	11	46	17	41
Bynum.....	13	22	18	17	22	14	24	13	14	22	17	20	19	18	20	17	13	21	13	20	23	14
Lake Basin .....	2	9	2	9	4	6	....	11	2	9	3	8	1	10	1	10	3	8	1	10	3	8
Lowery .....	13	10	13	44	9	16	13	14	8	17	18	10	14	12	19	8	17	7	15	7	16	9
Robare .....	69	73	82	65	98	52	79	69	112	38	90	58	86	63	88	62	83	61	77	70	84	39
Shelby .....	83	43	74	48	78	50	87	41	15	43	83	44	85	42	89	43	84	39	87	31	79	53
Sweet Grass .....	3	5	2	7	7	3	1	9	2	7	2	7	3	6	2	8	3	7	5	4	4	4
St. Mary's .....	40	60	36	62	37	61	40	59	44	58	42	55	43	57	33	68	41	56	36	60	37	60
Dupuyer .....	48	126	48	121	53	121	66	110	103	73	78	94	73	94	76	102	67	98	46	123	91	87
Collins .....	5	6	5	6	8	2	5	6	6	5	5	5	9	2	5	6	6	5	5	6	6	5
Raymond .....	14	11	7	19	11	16	7	21	10	17	13	12	11	17	19	8	15	10	10	13	14	10
North Fork .....	6	5	4	7	6	5	3	7	3	7	4	6	4	6	4	6	4	6	5	6	4	5
Bellevue .....	18	12	8	23	23	9	11	21	16	16	20	13	17	14	20	12	22	10	16	12	15	16
Pondera .....	24	29	17	32	22	28	27	26	21	32	23	28	24	28	20	31	23	20	21	27	45	7
Total .....	457	581	401	631	509	538	470	587	523	531	515	530	512	534	522	541	500	518	433	564	540	511
Pluralities .....	124	...	...	230	...	29	...	117	...	8	...	15	...	22	...	19	...	18	...	131	36	...





## VALLEY COUNTY—Continued.

PRECINCTS	Memb'rs Legisl're		Sheriff's		Clerk (Dist'ct Court)		Treas'r		Clerk & Recorder		Assessor		County Attorney		Supt of Schools		Ad- m'r		Coroner		Sur- veyor	
Malta .....	60	83	74	78	4	30	110	42	63	73	70	29	116	62	77	13	52	75	53	87	46	155
Saco .....	35	50	40	46	14	47	21	39	47	31	49	22	63	29	51	31	3	36	49	31	78	
Hinsdale .....	48	11	48	11	25	14	19	46	12	37	22	53	6	42	18	52	4	4	49	13	53	56
Glasgow .....	120	102	88	131	142	45	31	133	15	76	143	116	96	147	72	98	55	59	128	90	124	196
Nashua .....	12	12	5	18	9	12	1	11	9	10	13	11	10	9	13	5	9	11	10	8	121	
Culbertson .....	12	75	21	67	10	39	34	3	15	20	6	20	68	14	75	27	56	3	30	72	14	83
Springdale .....	7	6	7	7	3	5	6	7	7	7	7	7	7	5	9	6	7	1	5	6	7	14
Total .....	294	339	283	358	207	192	225	341	288	254	372	258	306	308	315	232	236	154	312	337	273	686
Pluralities .....	...	45	...	75	...	...	18	53	...	...	118	...	108	...	7	...	4	...	...	54	...	...



YELLOWSTONE COUNTY—Continued.

Precincts.	Jury		Mem's Legislat're		Sheriff		Cl'k		Cl'k & Recordr		Assessor		County Attorney		Supt' of Schools		Adm'r		Coroner		Sur-veyor		County Commissioners			
	Jury	Dist	1st	2d	1st	2d	1st	2d	1st	2d	1st	2d	1st	2d	1st	2d	1st	2d	1st	2d	1st	2d	1st	2d		
Junction.....	33	18	17	.....	23	11	24	20	15	23	18	17	14	21	13	20	15	18	17	18	21	17	22	16	13	
North Billings.....	477	245	235	11	302	200	293	191	300	297	201	293	235	177	255	168	245	252	106	206	278	322	227	223	213	
South Billings.....	184	235	25	297	152	2	9	222	213	252	200	235	177	255	168	245	252	106	192	234	247	202	202	230	202	
Canyon Creek.....	38	37	35	3	47	31	51	32	45	48	28	47	30	39	18	59	39	35	36	40	48	240	37	41	40	
Laurel.....	104	46	61	3	39	73	50	29	80	54	50	63	33	33	78	32	19	35	35	35	73	75	28	58	78	
Park City.....	95	35	62	1	60	43	47	27	70	47	44	57	32	65	50	53	38	56	34	65	69	33	35	32	68	
Columbus.....	97	34	63	12	38	65	56	44	54	59	45	54	38	59	46	55	47	50	41	58	58	45	40	52	49	
Thomas.....	23	2	21	5	19	3	3	20	5	3	3	20	2	21	21	21	3	20	21	3	20	21	3	20	21	
Upper Musseshell.....	25	24	4	.....	25	3	23	24	4	24	22	5	7	20	13	25	16	8	16	9	12	10	19	6	40	
Round View.....	20	6	18	.....	18	7	19	11	5	19	4	19	4	22	4	20	17	17	8	18	21	9	11	13	8	
Fairview.....	18	11	5	1	16	2	15	18	.....	13	12	6	11	7	9	9	15	3	8	10	9	11	13	8	3	
Musseshell.....	60	41	22	2	52	13	50	36	26	46	33	27	22	41	21	43	31	27	28	32	38	29	54	22	21	
Total.....	1434	687	768	59	915	626	892	654	814	877	661	812	515	970	549	929	785	672	622	852	941	700	710	658	783	732
Pluralities.....	.....	.....	81	.....	289	.....	190	.....	.....	.....	.....	181	455	.....	.....	380	113	.....	.....	230	.....	.....	.....	.....	.....	.....

## SEVENTH ANNUAL REPORT OF BUREAU

OFFICIAL VOTE OF THE STATE OF MONTANA BY COUNTIES, 1900.

PRECINCTS	President			Congress			Governor			Lieutenant Governor			Secretary of State						
	McKinley, r.....	Debs, soc. d....	Woolley, pro.....	Malloney, soc. lab...	Edwards, f.-p.....	Murray, r.....	Kelley, i-d....	Elliott, Soc. Dem....	Toole, f.-d.....	Folsom, r.....	Hogan, i.-d.....	Fox, Soc. Dem.....	Higgins, f.-d.....	Bennett, r.....	Marion, i.-d....	Davis, Soc. Dem....	Hays, f.-d.....	Yoder, r.....	Horne, Soc. Dem....
Beaverhead .....	937	767	5	2	1	881	750	35	4	739	30	3	911	746	28	28	916	749	3
Broadwater .....	572	318	5	4	2	518	291	47	4	577	39	4	551	294	35	35	561	293	4
Carbon.....	907	930	26	2	1	617	82	257	17	711	818	276	70	826	232	18	957	800	19
Cascade.....	2,564	1,997	56	26	5	2,281	1,9	205	42	2,479	1,849	284	23	1,889	239	37	2,518	1,926	37
Choteau .....	629	1,008	5	7	21	561	1,0	47	2	697	1,019	54	2	1,033	43	37	621	1,020	4
Custer .....	477	930	2	2	3	636	96	6	1	634	944	5	1	979	5	1	649	972	6
Dawson .....	209	521	5	21	2	218	1,57	1,661	3	269	480	.....	2	485	2	4	482	482	.....
Deer Lodge.....	3,397	1,636	121	17	24	1,551	1,57	1,661	100	1,885	1,522	1,536	83	789	1,489	88	3,167	1,538	98
Fergus .....	913	1,228	11	3	2	925	214	8	4	1,000	1,172	8	4	1,136	11	910	1,203	1,186	5
Flathead .....	1,201	1,104	24	24	21	911	1,068	269	16	1,026	1,024	251	14	955	251	15	1,184	1,038	14
Gallatin .....	1,297	1,146	22	50	2	1,117	1,132	176	16	1,201	1,096	179	15	1,137	167	15	1,296	1,105	17
Granite.....	1,020	401	9	4	1	711	38	190	5	866	348	186	4	371	160	5	969	382	15
Jefferson.....	880	488	9	21	.....	834	48	94	9	919	460	19	8	491	81	8	920	499	7
Lewis and Clarke .....	2,763	2,043	42	11	2	2,551	1,973	162	23	2,982	1,764	179	20	1,896	137	27	2,879	1,845	32
Madison .....	1,298	1,030	6	14	.....	1,199	1,029	96	1	1,296	985	91	2	1,146	1,130	72	1,263	1,043	.....
Meagher .....	406	414	1	2	.....	251	402	118	.....	368	392	81	.....	316	394	91	384	398	1
Missoula.....	1,893	1,392	24	15	21	1,207	1,349	490	44	548	1,219	500	18	1,156	496	13	1,787	1,237	13
Park .....	900	903	59	20	.....	750	82	149	56	907	786	157	40	811	103	44	882	816	4
Ravalli .....	1,052	892	11	34	31	631	817	352	15	874	748	334	7	762	335	9	1,010	817	12
Silver Bow .....	12,101	3,873	240	35	61	7,956	2,927	4,923	227	8,468	2,938	4,730	203	2,961	4,527	216	12,573	3,134	203
Sweet Grass .....	278	460	.....	1	.....	276	447	8	.....	305	435	12	1	283	441	12	291	447	.....
Teton .....	457	573	4	3	3	425	515	37	4	456	516	42	4	446	551	30	472	550	4
Valley .....	234	363	2	1	.....	237	357	2	1	274	348	2	.....	342	2	.....	247	352	.....
Yellowstone .....	654	816	19	8	.....	616	700	48	19	657	774	63	16	765	44	16	738	613	16
Total .....	37,146	25,373	708	298	116	28,130	21,297	9,443	613	31,419	22,691	9,188	506	29,700	8,592	535	37,471	23,338	550
Pluralities .....	11,773	.....	.....	.....	.....	4,923	.....	.....	.....	8,728	.....	.....	.....	6,478	.....	.....	14,12	.....	.....



## OFFICIAL VOTE OF THE STATE OF MONTANA—Continued.

COUNTIES	Attorney General			State Treasurer			State Auditor			Sup't Public Instruction			Associate Justice Supreme Court		Amend'm't to Constitution						
	Porter, r.....	Stewart, i.-d.....	Beckwith, soc. d. . .	Barret, f.-d.....	Edwards, r.....	Livingston, i.-d.....	Topel, soc. d.....	Calderhead, f.-p ....	Proctor, r.....	McLean, i.-d.....	Lamson, soc. d....	Welsh, f.-l.....	Harmon, r.....	Leamy, i.-d.....	Partelow, soc. d. .	Milburn, f.-d.....	Von Tobel, r.....	Word, i.-d.....	For.....	Against .....	
Beaverhead .....	881	749	881	3	901	739	21	3	883	749	27	4	877	755	30	4	872	740	35	222	42
Broadwater .....	528	222	528	4	513	289	60	5	510	291	27	3	517	249	29	5	525	292	38	54	63
Carbon.....	633	835	633	24	631	808	253	16	629	748	40	16	663	85	230	17	711	810	236	99	8
Cascade.....	2,182	2,011	2,182	35	2,279	1,911	212	35	2,116	2,224	209	31	2,227	1,981	226	33	2,311	1,880	274	2,455	212
Choteau .....	549	1,084	549	39	563	1,055	3	3	547	1,065	31	3	538	1,071	40	3	598	1,074	42	221	9
Custer .....	619	991	619	6	628	961	4	4	521	961	4	2	480	953	5	.....	870	735	7	121	44
Dawson .....	253	503	253	3	552	482	5	.....	6	251	491	2	5	208	49	1	259	487	5	58	31
Deer Lodge.....	655	625	655	87	1,610	1,622	1,438	87	1,610	1,609	1,467	133	1,601	1,610	1,485	85	1,654	1,576	1,512	702	293
Fergus .....	846	1,276	846	7	927	1,201	11	5	912	1,220	5	4	910	1,221	6	6	1,028	1,101	18	273	51
Flathead .....	916	1,057	916	38	923	1,059	214	12	933	1,049	246	14	910	1,040	251	13	977	1,029	254	702	303
Gallatin .....	1,078	1,118	1,078	14	1,101	1,101	172	65	1,106	1,123	159	15	951	1,133	114	13	1,145	1,074	181	326	201
Granite.....	729	405	729	5	743	383	15	5	725	382	143	6	68	425	170	5	728	365	165	144	131
Jefferson.....	827	519	827	8	821	501	9	7	839	501	65	9	814	529	71	8	847	481	71	119	48
Lewis and Clarke .....	2,559	2,018	2,559	139	2,091	1,927	115	27	2,600	1,972	128	24	2,550	2,015	125	24	2,610	1,762	338	410	11
Madison .....	1,169	1,016	1,169	2	1,206	1,120	82	1	1,185	1,015	78	3	1,179	1,033	81	1	1,175	1,071	102	202	127
Meagher .....	261	405	261	.....	260	401	121	.....	264	402	107	.....	25	48	106	.....	268	394	106	79	35
Missoula.....	1,414	1,264	1,414	13	1,353	1,251	4	13	1,396	1,267	432	12	1,351	1,248	429	5	1,395	1,183	461	422	335
Park .....	751	846	751	40	587	680	505	35	732	840	117	41	725	886	88	44	739	1,183	106	224	166
Ravalli .....	666	839	666	13	663	845	329	8	653	826	340	7	625	849	323	5	654	808	343	288	337
Silver Bow .....	8,110	3,065	8,110	3	8,254	2,917	4,482	298	8,155	2,919	4,474	203	7,921	3,032	4,633	207	8,174	2,836	4,610	1,130	472
Sweet Grass .....	239	460	239	.....	270	446	1	1	269	458	10	.....	261	468	9	.....	289	439	10	46	21
Teton .....	441	561	441	3	433	569	21	3	437	566	25	3	437	563	23	3	444	548	28	79	47
Valley .....	247	357	247	.....	245	353	1	.....	243	355	2	.....	243	355	1	.....	267	330	2	54	5
Yellowstone .....	607	794	607	18	605	767	62	16	618	775	46	16	576	825	40	15	557	687	37	477	111
Total .....	28,258	24,161	28,258	551	28,517	21,372	9,013	578	28,174	23,895	8,549	552	27,476	24,349	8,516	502	29,377	23,340	9,001	8,918	3,425
Pluralities .....	4,667	.....	4,667	.....	5,145	.....	.....	.....	4,279	.....	.....	.....	3,097	.....	.....	.....	6,997	.....	.....	.....	.....

## NOTES

Since printing the congressional delegation of the state, the following election by the Seventh Legislative Assembly has occurred:

### UNITED STATES SENATOR—SHORT TERM.

Name	Address	Elected	Term Expires
Paris Gibson.....	Great Falls.....	Mar. 7, 1901	Mar. 4. 1905

### THE NEW LEGISLATIVE APPORTIONMENT

The following re-apportionment was made by the Seventh Legislative Assembly:

Counties	Senators	Representatives
Beaverhead ... ..	1	2
Broadwater... ..	1	1
Carbon .....	1	2
Cascade .....	1	7
Choteau.....	1	3
Custer .....	1	1
Dawson .....	1	1
Deer Lodge ... ..	1	4
Fergus .....	1	2
Flathead .....	1	3
Gallatin .....	1	3
Granite .....	1	1
Jefferson .....	1	2
Lewis and Clarke .....	1	3
Madison .....	1	2
Meagher .....	1	1
Missoula .....	1	4
Park .....	1	2
Powell (Deer Lodge) ... ..	1	1
Ravalli.....	1	2
Rosebud .....	1	1
Silver Bow.....	1	12
Sweet Grass .....	1	1
Teton .....	1	1
Valley.....	1	1
Yellowstone .....	1	2
Total .....	26	67

### NEW COUNTIES.

The Seventh Legislative Assembly created the following new counties:

Deer Lodge County was divided, creating the counties of Daly and Deer Lodge.

Deer Lodge county was formed of that part of the county lying north of Warm Springs creek, and the measure creating the county nominated the following for the first officers of the county:

Henry B. Davis, County Commissioner; William T. Kuehn, County Commissioner; T. B. Mannix, County Commissioner; John McMahon, Sheriff; James H. Mills, Clerk and Recorder; Robert G. Humber, Treasurer; A. D. Goodfellow, Assessor; R. Lee Kelley, Clerk of the District Court; James M. Simpson, County Attorney; Inez Elliott, County Superintendent of Schools; Nathan Smith, Coroner; W. I. Huffaker, County Surveyor; M. D. Platner, Public Administrator.

The southern portion of the county was created Daly county, and the officers elected at the last general election for Deer Lodge county became the officers of this county.

The county of Rosebud was created from the western portion of Custer county and Forsyth was made the county seat. Following are the officers of the new county.

Freeman Philbrick, Commissioner; W. W. McDonald, Commissioner; Hunter Terret, Commissioner; Charles W. Bailey, Clerk and Recorder; Charles Davis, Sheriff; T. W. Longley, Treasurer; James B. Grierson, Clerk of the District Court; Fred. L. Gibson, County Attorney; William Choisser, Assessor; Gertrude M. Higgins, Superintendent of Common Schools; R. W. Snook, Public Administrator; J. F. Kennedy, Coroner; Charles B. Taber, County Surveyor.

STATEMENT SHOWING VOTE OF THE STATES ON PRESIDENT-ELECTION  
NOVEMBER 6, 1900.

	Electoral Votes		McKinley, r.....	Bryan, d.....	Woolley, pro.....	Parker, pro.....	Debs, soc. d.....	Maloney, soc. lab.
	McKinley....	Bryan .....						
Alabama .....	11	8	53,669	96,369	1,407	3,797	.....	.....
Arkansas.....	8	8	44,800	81,142	584	972	.....	.....
California .....	9	9	164,755	124,985	5,024	.....	7,572	.....
Colorado .....	4	4	93,072	122,733	3,790	389	684	714
Connecticut .....	6	6	102,572	74,014	1,617	.....	1,029	908
Delaware .....	3	3	22,560	18,863	546	.....	57	.....
Florida .....	4	4	7,499	28,007	2,239	1,090	603	.....
Georgia .....	13	13	35,036	81,700	1,896	4,584	.....	.....
Idaho .....	3	3	27,198	29,414	857	213	.....	.....
Illinois.....	24	24	597,985	503,061	17,626	1,141	9,687	1,373
Indiana .....	15	15	336,063	309,584	13,718	1,438	2,374	663
Iowa .....	13	13	307,808	209,265	9,502	613	2,742	259
Kansas .....	10	10	185,955	162,601	3,605	.....	1,605	.....
Kentucky .....	13	13	226,801	234,899	2,429	2,017	760	289
Louisiana .....	3	3	14,233	53,671	.....	.....	.....	.....
Maine .....	6	6	65,435	36,823	2,585	.....	878	.....
Maryland .....	8	8	136,212	122,271	4,582	.....	908	391
Massachusetts.....	15	15	239,147	157,016	6,208	.....	9,716	2,610
Michigan .....	14	14	316,269	211,685	11,859	833	2,826	908
Minnesota.....	9	9	190,461	112,901	8,555	.....	3,035	1,324
Mississippi.....	9	9	5,753	51,706	.....	1,644	.....	.....
Missouri .....	17	17	314,093	351,913	5,963	4,244	6,128	1,294
Montana .....	3	3	25,373	37,146	298	.....	708	116
Nebraska .....	8	8	121,835	114,013	3,686	1,104	823	.....
Nevada .....	3	3	3,849	6,347	.....	.....	.....	.....
New Hampshire .....	4	4	54,798	35,489	1,271	.....	790	.....
New Jersey .....	10	10	221,707	164,808	7,183	669	4,609	2,074
New York .....	36	36	821,992	678,386	22,043	.....	12,869	12,622
North Carolina .....	11	11	133,081	157,752	1,009	830	.....	.....
North Dakota .....	3	3	35,891	20,519	731	110	518	.....
Ohio .....	23	23	543,918	474,882	10,203	251	4,847	1,688
Oregon .....	4	4	46,526	33,385	2,536	275	1,494	.....
Pennsylvania .....	32	32	712,665	424,232	27,908	635	4,831	2,936
Rhode Island .....	4	4	33,784	19,812	1,529	.....	.....	1,423
South Carolina .....	9	9	3,525	47,283	.....	.....	.....	.....
South Dakota .....	4	4	54,530	39,544	1,542	339	169	.....
Tennessee .....	12	12	123,008	145,250	3,900	1,368	410	.....
Texas .....	15	15	130,641	267,432	2,614	20,981	1,846	162
Utah.....	3	3	47,089	44,919	205	.....	717	106
Vermont .....	4	4	42,569	12,849	383	367	.....	.....
Virginia .....	12	12	115,865	146,080	2,150	.....	.....	.....
Washington .....	4	4	57,456	44,833	2,345	.....	1,906	1,066
West Virginia .....	6	6	119,851	98,791	1,586	279	286	.....
Wisconsin .....	12	12	265,866	159,285	10,124	.....	7,095	524
Wyoming .....	3	3	14,482	10,164	.....	2	.....	.....
Total.....	292	155	7,217,677	6,357,833	207,868	50,188	94,552	33,450

In addition there were votes returned in five states for the candidates of the National Union Reform Party, Seth H. Ellis of Ohio, for President, and in two states for the candidates of the United Christian Party, J. F. R. Leonard of Iowa for President—these votes being as follows: National Union Reform—Arkansas, 341; Illinois, 672; Indiana, 254; Maryland, 147 and Ohio, 4,284; total, 5,698. United Christian—Illinois, 352; Iowa, 163; total, 518. Plurality of McKinley over Bryan, 859,844 Majority over all 468,070.

## MONTHLY AND ANNUAL MEAN TEMPERATURES

Stations	January		February		March		April	
	Mean..	Dep....	Mean..	Dep....	Mean..	Dep....	Mean..	Dep....
Adel.....	30.8	.....	18.6	.....	33.7	.....	41.7	.....
Augusta.....	.....	.....	.....	.....	.....	.....	.....	.....
Big Timber.....	.....	.....	.....	.....	.....	.....	45.4	1.5
Billings.....	30.2	5.2	23.2	3.1	38.0	45.3	48.3	2.7
Boulder.....	27.4	8.6	22.2	1.2	35.7	8.5	44.2	2.9
Bozeman Agri. College.....	30.8	.....	20.4	.....	37.1	.....	43.4	.....
Butte.....	30.2	7.1	23.0	0.7	37.6	10.6	44.8	0.7
Canyon Ferry.....	28.0	.....	22.8	.....	40.0	.....	30.4	.....
Chester.....	.....	.....	.....	.....	.....	.....	.....	.....
Chinook.....	27.0	.....	12.3	.....	29.9	11.2	49.2	4.9
Clemons.....	34.0	11.4	20.9	1.3	36.6	10.7	45.5	5.0
Columbia Falls.....	28.6	5.2	22.8	1.7	38.6	7.7	48.8	4.7
Corvallis.....	33.2	.....	27.9	.....	42.5	.....	46.5	.....
Crow Agency.....	26.7	5.9	22.0	4.7	36.4	6.7	50.2	3.1
Culbertson.....	.....	.....	.....	.....	.....	.....	.....	.....
Deer Lodge.....	29.2	7.9	25.7	1.4	.....	.....	.....	.....
Dell.....	19.6	.....	17.4	.....	33.5	.....	41.6	.....
Dillon.....	31.2	.....	26.8	.....	36.2	.....	45.9	.....
Dupuyer.....	.....	.....	.....	.....	34.4	.....	.....	.....
Ekalaka.....	27.6	.....	15.6	.....	31.4	.....	48.3	.....
Fort Benton.....	33.0	14.6	21.4	2.7	.....	.....	.....	.....
Fort Logan.....	24.8	7.1	19.6	2.8	32.5	6.5	42.8	3.6
Glasgow.....	19.7	11.2	8.0	0.9	29.4	9.8	51.2	6.1
Glendive.....	25.9	12.0	14.2	1.0	29.4	5.0	54.2	6.6
Glenwood.....	29.6	.....	21.3	.....	36.4	.....	44.4	.....
Great Falls.....	32.8	7.42	21.7	4.6	37.7	5.6	49.0	2.5
Harlem.....	26.4	13.2	13.2	.....	.....	.....	.....	.....
Havre.....	27.3	15.3	11.3	1.8	31.2	5.3	49.5	6.2
Helena.....	31.0	12.3	21.9	.....	38.6	6.5	47.4	3.5
Kallispeil.....	30.4	.....	23.9	.....	39.2	.....	48.0	.....
Kipp.....	26.8	7.9	16.8	2.0	32.5	9.3	44.0	4.1
Lewistown.....	.....	.....	18.0	6.6	35.0	9.3	46.3	4.3
Livingston.....	.....	.....	.....	.....	34.9	5.5	.....	.....
Manhattan.....	26.6	6.3	23.3	0.2	37.8	9.4	47.2	.....
Martinsdale.....	31.7	8.7	21.8	0.4	35.8	7.6	45.2	3.2
Marysville.....	27.4	6.0	18.2	4.1	32.8	8.1	42.6	1.4
Miles City.....	29.4	13.2	16.8	0.8	34.2	5.7	53.0	6.8
Missoula.....	29.8	10.0	26.0	1.5	42.4	9.0	50.6	6.0
Ovando.....	19.8	.....	19.3	.....	32.6	.....	45.9	.....
Parrot.....	31.6	.....	24.8	.....	33.8	.....	46.4	.....
Plains.....	32.2	.....	27.0	.....	41.0	.....	49.6	.....
Poplar.....	21.2	16.7	8.7	2.8	27.5	6.5	51.0	7.8
Red Lodge.....	27.7	.....	17.6	.....	31.5	.....	42.0	.....
Ridge.....	27.8	.....	17.8	.....	33.6	.....	48.2	.....
Ridgeland.....	.....	.....	.....	.....	.....	.....	.....	.....
St. Paul's.....	.....	.....	17.5	2.1	33.2	11.0	.....	.....
Trov.....	32.2	5.7	29.1	0.8	41.0	6.8	50.8	3.3
Twin Bridges.....	28.8	.....	22.3	.....	35.2	.....	45.3	.....
Utica.....	30.6	7.6	20.4	2.6	34.4	7.7	45.8	3.1
Wibaux.....	24.6	8.0	14.8	4.4	.....	.....	46.8	0.3
Yale.....	26.8	3.8	21.4	4.1	33.9	7.4	44.4	3.2
Fort Yellowstone.....	22.1	.....	15.5	3.3	34.0	7.7	42.0	.....
Lovell, Wyo.....	21.8	.....	18.5	.....	26.8	.....	45.2	.....
Parkman, Wyo.....	.....	.....	21.8	.....	35.6	.....	45.9	.....
Sheridan, Wyo.....	25.0	6.9	20.6	2.8	35.4	8.3	.....	.....
Williston, N. D.....	19.1	.....	3.2	15.8	22.8	0.8	51.4	9.0
Spokane, Wash.....	35.8	11.5	31.5	.....	45.2	6.2	51.1	.....



## WITH DEPARTURES FROM THE NORMAL

May		June		July		August		September		October		November		December		Annual	
Mean..	Dep....	Mean..	Dep....	Mean..	Dep....	Mean..	Dep....	Mean..	Dep....	Mean..	Dep....	Mean..	Dep....	Mean..	Dep....	Mean..	Dep....
49.0		58.2		59.8						45.9		29.8					
				74.7	2.9	69.6	0.7	57.6	2.3								
53.3	3.6	63.7	6.7	62.0	0.4	59.6	3.3	48.2	3.0	41.4		26.5	4.0	30.0	5.6	42.8	2.2
53.4		63.8		63.4		61.0		53.1		43.5		29.8		30.0		44.1	
52.5	3.7	63.8	7.1	63.9	1.0	59.2	3.8	51.3	0.5	43.8	0.1	33.7	1.4	30.5	4.7	44.5	2.9
58.2		70.0		69.8		66.0		54.6		48.6							
						69.1		59.8		54.4		30.5		27.0			
60.0	4.1	69.2	4.6	70.2	0.1	64.0	0.8	53.6	1.9								
52.8	3.5	61.3	4.1							45.2	0.9	29.0	0.3	34.1	6.5		
51.7	1.0	60.8	2.6	63.9	0.7	57.2	7.3	2.6	0.1	42.2		27.6		31.4	5.3	43.8	
54.0		64.3		66.4		61.2		56.4		48.6		32.0		34.9		47.3	
60.1	3.7	70.0	5.6	70.0	1.2	67.6	3.3	56.8	2.8	47.8	0.5	30.4	1.7	32.2	4.4	47.5	2.0
														21.0			
51.1		62.8		62.5		59.1						26.2		21.2			
56.4		64.6		61.6		59.8		52.2		43.8		31.2		31.2		45.1	
52.8		65.0		65.6		55.6											
64.1		71.0		71.0				60.3		49.6		29.2					
59.0	2.3	70.0	5.9	69.9	0.5	65.4	2.5										
51.4	3.6	60.3	4.4	60.8	1.8	58.0	3.0	48.8	2.7	42.6	1.0	27.8	0.9	27.0	6.1	41.4	2.3
61.6	4.3	70.3	6.0	71.0	0.2	69.0	0.8	53.6	2.4	47.0	4.1	17.6	3.7	22.0	4.7	43.4	3.4
63.7	5.2	72.5	6.1	72.4	0.6	72.2	0.2	55.6	4.8	49.8	2.3	33.4	4.6	28.1	6.3	46.8	2.9
51.8		63.3		63.0		60.2		52.0		43.4		28.8		30.4		43.7	
57.8	3.4	68.6	6.3	69.6	1.0	65.2	1.4	54.1	2.8	47.2	10.0	31.6	0.5	37.3	6.5	47.7	2.8
58.7	5.7	68.2	6.9	68.8	1.2	65.8	0.1	53.4	2.1	46.8	3.6	23.8	4.8	31.5	9.3	44.7	3.7
55.4	3.2	66.1	6.3	67.0	0.1	63.8	2.6	53.0	3.3	45.8	0.6	29.5	2.1	32.8	6.6	46.0	2.6
52.6		61.6	1.6	63.4	1.8	58.4	4.6	51.9	1.9	43.6		27.8		31.3	4.4	44.3	
50.8	2.2	59.4	3.8	58.7	2.4	53.4	1.5	48.4	1.3	39.0	0.1	25.1	0.4	32.3	7.3	40.8	2.3
55.1		64.6		65.1		61.2		51.8		44.2		29.8		30.8			
56.2		66.4		66.4		64.7		56.7		49.8	2.4	34.5	3.4	37.2	6.9		
55.8	3.2	65.6	5.8			61.6	0.8	53.6	1.4	44.4	3.4	28.4	0.4				
53.6	2.4	63.6	5.1	64.2	1.7	62.3	2.2	51.4	2.3	44.0	0.7	30.4	0.8	32.3	5.3	44.7	2.2
50.8	2.2	61.8	5.6	63.1	0.1	59.0	3.4	48.8	2.7	42.1	0.3	27.8	1.3	29.0	3.4	42.0	1.3
63.8	7.2	73.6	7.6	73.4	0.5	71.9	0.2	57.8	2.5	50.6	3.5	27.8	1.0	30.8	7.1	48.6	4.1
55.9	1.9	64.6	4.7					55.4		45.8	1.0	29.0	3.1	29.9	5.3		
51.0		57.6		58.3		54.6		49.0		39.9		23.2		23.6		39.6	
56.0		67.2		66.8		64.0		53.4		44.4		32.0					
55.8		64.8		67.3		61.3		55.0		45.8		31.0		34.0		47.1	
62.4	8.0	71.0	6.9	73.0	3.4	71.0	4.0	55.3	1.6	47.8	4.3	21.0	3.8				
50.0		64.0		62.4		61.0		49.6						27.9			
60.1		69.2		69.8		70.6											
63.2		70.6		70.7		69.8		54.8		48.3		20.6		24.6			
		67.2	6.7	66.6		64.6	1.2	53.0	3.5	48.9				32.2			
54.5	0.2	61.8	1.0	63.7	1.1	59.4	3.3	56.2	1.0	45.1	4.1	31.2	4.2	32.5	4.0	46.5	1.1
53.2		62.4		62.4		60.5		51.4		42.0		28.2		27.4		43.2	
54.6	3.6	64.9	5.8	66.2	0.9	62.8	2.6	51.6	3.1	45.2	1.4	29.4	1.0	32.0	3.3	44.7	2.0
58.1	2.0	68.2	3.9	69.0	0.4	64.6	2.6	53.5	2.8	46.3	0.5	27.2					
53.8	4.1	66.0	7.1	66.0	1.3	64.7	0.6	52.6	1.5	43.6	2.0	29.7	1.5	32.2	4.1	44.6	2.2
50.5	3.1	62.0	7.0	61.2	1.1	60.6	0.9	50.0	2.8	42.4	1.1	29.0	0.5	24.4	3.0	41.1	
61.6		70.4		68.3		67.2		53.5		46.2		26.6		27.2		44.8	
56.0		67.0		67.2		67.0		55.9		48.4		32.7		34.0			
		63.9	5.3	66.0	1.1	66.4	0.1	56.1	0.4	47.6	3.4	30.4	0.8	31.6	7.1		
62.2	7.0	69.0	2.0	70.2	2.0	68.9	2.9	53.4	3.0	47.2	4.0	18.8	6.0	21.2	7.0	43.2	
57.5	1.0	66.0	4.0	69.6	1.0	64.0	0.4	58.2		48.2		34.2	3.0	37.1	6.0	50.0	

## MONTHLY AND ANNUAL PRECIPITATION

Stations	January		February		March		April	
	Prec...	Dep....	Prec...	Dep....	Prec...	Dep....	Prec...	Dep....
Adel...	0.20		1.20		1.43		2.52	
Augusta								
Big Timber							12.27	
Billings								
Boulder	0.53	0.35	0.75	0.45	0.53	0.22	1.59	0.16
Bozeman Agr. Col.	0.11		1.60		0.89		3.24	
Butte	0.30	0.64	1.05	0.35	1.20	0.27	2.75	1.58
Canyon Ferry	T		0.50		0.59		1.07	
Chester								
Chinook	0.10		0.85		1.00	0.30	1.05	0.13
Clemons	0.20	1.19	1.80	0.72	0.85	0.60	3.37	1.53
Columbia Falls	0.31	1.51	0.82	0.53	0.54	0.75	1.44	0.17
Corvallis			0.45		0.35		1.45	
Crow Agency	0.04	0.76	0.51	0.05	0.10	0.58	3.99	2.54
Culbertson								
Deer Lodge	0.04	0.69	0.13	0.48				
Dell	0.20		0.65		0.40		2.58	
Dillon	0.01		0.31		1.23		2.27	
Dupuyer					1.10			
Ekalaka	0.25		0.66		0.80		0.93	
Fort Benton	T	0.63	0.30	0.14				
Fort Logan	T	0.60	0.54	0.19	0.79	0.01	1.33	0.35
Glasgow	0.11	0.34	0.51	0.19	1.47	0.03	1.16	0.18
Glendive	0.01	0.74	0.70	0.11	1.50	0.20	0.59	0.83
Glenwood	0.13		1.20		0.56		1.10	
Great Falls	0.02	0.80	0.77	0.30	0.53	0.23	1.39	0.13
Harlem	0.20							
Havre	0.12	0.70	0.72	0.18	0.76	0.20	1.38	0.41
Helena	0.03	1.15	0.64	0.11	0.90	0.08	2.49	1.34
Kalispell	0.84		0.99		0.56		1.33	
Kipp	0.17	0.64	1.00	0.10	0.62	1.01	1.52	0.10
Lewistown			0.50					
Livingston	T	0.30	0.14	0.55	0.44	0.44		
Manhattan	0.05	0.20	0.40	0.05	0.92	0.58	1.11	0.33
Martinsdale	0.20	1.14	0.70	0.15	0.40	0.60	4.75	3.31
Marysville	0.06	1.26	1.70	0.48	0.60	0.72	1.95	0.89
Miles City	0.13	1.49	0.39	0.56	0.77	0.67	0.96	0.01
Missoula	0.15	1.47	0.37	0.58	0.37	0.22	1.02	0.05
Ovando	2.51		2.24		1.15		0.77	
Parrot	T		0.20		0.57		2.68	
Plains	0.40		0.80		0.20		1.25	
Peplar		0.64	0.30	0.28	2.85	1.96	1.27	0.22
Red Lodge	1.90		1.50		1.62		7.90	
Ridge	0.80		0.20		0.70		2.64	
Ridgellawn								
St. Paul's			1.00	0.01	1.01	0.02		
Troy	2.23	0.11	1.05	0.47	3.02	1.32	0.90	0.43
Twin Bridges								
Utica	0.45	0.23	0.35	0.02	0.21	0.61	2.85	1.59
Wibaux	T	0.74	0.20	0.03			0.70	0.42
Yale	0.60	0.13	0.35		0.80	0.48	2.99	1.57
Fort Yellowstone	0.92		1.65	0.60	3.13	0.72	1.93	
Lovell, Wyo.	0.07		0.20		0.17		1.82	
Parkman, Wyo.			0.42		0.75		4.77	
Sheridan, Wyo.	0.10	1.06	0.65	0.32	1.11	0.41	4.18	
Williston, N. D.	0.03		0.85	0.34	1.25	0.61	0.57	0.80
Spokane, Wash.	1.39	1.20	1.19		2.25	0.82	1.09	

## A ND DEFARIURES FROM THE NORMAL

May		June		July		August		September		October		November		December		Annual	
Prec...	Dep...	Prec...	Dep...	Prec...	Dep...	Prec...	Dep...	Prec...	Dep...	Prec...	Dep...	Prec...	Dep...	Prec...	Dep...	Prec...	Dep...
3.85	.....	0.51	.....	0.24	.....	.....	.....	.....	.....	0.02	.....	1.60	.....	1.40	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	T	.....	.....	.....
1.88	0.41	0.19	1.81	0.97	0.13	0.54	0.03	1.17	0.02	1.57	0.95	0.10	0.17	0.37	0.07	10.24	0.01
2.51	.....	0.39	.....	1.32	.....	0.68	.....	1.24	.....	1.63	.....	.....	.....	0.52	.....	.....	.....
2.90	1.18	0.66	0.91	1.13	0.03	0.48	0.05	1.40	0.09	2.08	1.28	0.20	0.46	0.40	0.22	14.55	2.44
5.80	.....	0.10	.....	0.55	.....	1.42	.....	2.30	.....	1.34	.....	0.17	.....	.....	.....	.....	.....
.....	.....	0.30	.....	0.50	.....	1.70	.....	0.16	.....	0.02	.....	0.39	.....	T	.....	.....	.....
0.97	1.60	0.35	1.71	0.64	0.12	1.02	0.03	2.22	1.26	.....	.....	0.75	0.39	0.41	0.33	.....	.....
4.20	1.63	1.50	1.16	.....	.....	.....	.....	.....	.....	.....	.....	0.70	.....	0.05	.....	.....	.....
4.97	2.52	0.93	1.58	0.87	0.85	2.11	0.64	3.70	0.71	3.42	1.59	.....	0.99	.....	23.69	.....	.....
2.30	.....	1.49	.....	0.50	.....	1.30	.....	0.90	.....	0.30	.....	0.70	.....	0.05	.....	9.79	.....
0.47	1.73	.....	2.82	0.39	0.92	2.58	1.62	0.99	0.18	0.81	0.41	0.50	0.23	0.22	0.35	10.60	3.41
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.20	.....	.....	.....
0.05	.....	0.15	.....	0.01	.....	1.10	.....	0.45	.....	1.05	.....	0.60	.....	T	.....	7.24	.....
1.56	.....	0.73	.....	0.61	.....	1.32	.....	1.34	.....	2.84	.....	1.15	.....	0.17	.....	13.54	.....
7.54	.....	5.01	.....	0.30	.....	3.20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
0.86	.....	0.60	.....	0.73	.....	.....	.....	1.87	.....	0.04	.....	0.30	.....	.....	.....	.....	.....
0.90	1.65	0.62	1.80	0.53	1.12	0.55	0.29	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1.61	0.28	0.67	1.50	0.15	0.82	0.49	0.09	1.31	0.32	1.18	0.25	0.36	0.61	0.34	0.16	8.77	1.76
1.62	0.28	0.15	1.76	0.20	0.39	0.93	0.60	0.83	0.14	0.71	0.62	0.78	0.08	0.91	0.47	9.41	2.16
0.78	1.69	0.95	2.59	0.47	1.19	2.40	1.70	2.30	1.75	1.10	0.04	0.85	0.13	0.17	0.38	12.42	3.58
2.65	.....	0.23	.....	0.66	.....	1.16	.....	2.20	.....	2.58	.....	0.53	.....	0.77	.....	13.77	.....
2.73	0.50	0.64	2.17	0.46	1.00	1.53	0.92	1.17	0.14	0.80	0.25	1.44	0.46	0.20	0.27	11.68	1.67
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
0.88	0.90	0.62	2.31	1.37	0.63	1.62	0.30	2.21	1.08	0.85	0.15	0.64	0.10	0.26	0.29	11.43	2.67
3.22	1.37	0.19	2.09	0.23	0.88	0.59	0.08	1.39	0.27	1.21	0.23	0.30	0.54	0.43	0.37	11.62	1.84
3.90	.....	1.40	.....	0.75	.....	1.48	.....	3.02	.....	0.76	.....	1.87	.....	0.88	.....	17.78	.....
3.28	0.28	1.84	1.26	0.62	0.73	1.99	0.47	2.63	0.53	.....	.....	1.25	0.57	0.20	0.70	.....	.....
.....	.....	1.50	.....	.....	.....	4.20	.....	0.80	.....	1.00	.....	0.32	.....	T	.....	.....	.....
.....	.....	.....	.....	0.01	.....	0.80	.....	0.30	.....	1.20	0.04	0.03	1.20	0.40	0.03	.....	.....
1.44	0.09	0.64	0.89	.....	.....	.....	.....	0.28	0.76	0.79	0.09	0.10	0.40	.....	.....	.....	.....
1.74	0.44	T	2.62	1.00	0.80	0.81	0.14	0.46	0.83	0.75	0.20	0.40	0.80	0.30	0.36	11.51	4.54
2.79	0.50	0.03	2.10	0.30	0.81	0.80	0.21	1.34	0.46	1.42	0.51	0.97	0.56	0.86	0.16	13.45	3.14
0.20	1.76	0.35	1.75	0.58	0.49	4.58	3.83	2.00	0.80	0.10	1.22	0.39	1.07	0.10	1.40	10.55	2.13
4.19	2.23	2.78	0.18	.....	.....	.....	.....	2.25	1.05	0.72	0.60	1.05	0.39	1.07	0.43	.....	.....
4.99	.....	1.97	.....	0.19	.....	1.80	.....	1.64	.....	1.27	.....	1.69	.....	2.43	.....	22.65	.....
0.74	.....	0.05	.....	0.39	.....	0.26	.....	0.80	.....	1.75	.....	0.16	.....	.....	.....	.....	.....
4.00	.....	2.20	.....	0.60	.....	2.27	.....	2.30	.....	0.86	.....	1.28	.....	0.50	.....	16.66	.....
1.54	0.16	.....	.....	.....	.....	3.13	2.23	2.52	1.74	0.91	0.11	0.90	0.01	.....	.....	.....	.....
1.60	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.90	.....	.....	.....
1.07	.....	1.83	.....	1.41	.....	1.02	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1.45	.....	1.79	.....	1.09	.....	2.31	.....	3.28	.....	0.27	.....	0.65	.....	0.17	.....	.....	.....
.....	.....	0.83	0.87	0.69	0.24	1.22	0.11	1.41	0.86	1.23	0.31	0.45	0.14	0.15	.....	.....	.....
2.90	0.87	3.99	1.93	0.67	0.21	1.33	0.27	2.26	0.17	3.38	1.70	2.60	2.07	3.02	0.57	27.25	3.54
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1.04	1.25	0.44	2.70	0.70	1.18	2.20	1.16	0.82	0.02	0.86	0.13	0.29	1.02	0.21	0.26	10.42	4.82
1.55	0.83	1.70	2.39	1.90	0.35	4.77	3.59	0.42	0.12	1.62	1.12	0.10	0.58	.....	.....	.....	.....
1.02	0.58	0.26	1.16	0.37	1.29	0.83	0.29	0.33	0.33	1.10	0.07	0.25	0.75	T	0.38	8.90	2.91
2.42	0.52	1.17	0.59	0.80	0.43	0.28	0.83	0.86	0.01	1.22	.....	1.17	0.38	1.18	.....	16.73	.....
0.51	.....	0.17	.....	0.08	.....	0.05	.....	0.50	.....	0.21	.....	0.21	.....	0.09	.....	4.08	.....
0.70	.....	0.45	.....	0.78	.....	0.42	.....	1.35	.....	0.32	.....	0.06	.....	0.58	.....	.....	.....
0.70	1.67	0.18	1.37	0.33	0.34	0.66	0.14	1.08	0.05	0.37	0.38	0.10	0.72	0.76	0.16	10.27	.....
1.46	0.66	0.65	2.74	2.34	1.00	4.47	3.32	2.24	1.44	1.03	0.05	0.71	0.08	0.21	0.38	15.81	.....
2.12	0.67	0.42	.....	0.34	0.30	0.64	0.16	1.65	0.64	2.55	1.04	2.21	0.02	2.87	0.35	.....	18.12

NORMAL TEMPERATURE FOR STATIONS HAVING FIVE OR MORE YEARS  
RECORD UP TO JANUARY 1, 1901.

Stations	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug	Sept.	Oct.	Nov.	Dec.	Annual Normal
Billings...	25.0	26.3	32.7	51.0	57.0	63.2	71.8	68.9	59.9	.....	.....	29.5	.....
Boulder .....	18.8	21.0	27.2	41.3	49.7	57.0	61.6	62.9	51.2	41.4	30.5	24.4	40.6
Butte .....	23.1	23.7	27.0	40.1	48.8	56.7	62.9	63.0	51.8	43.7	32.3	25.8	41.6
Chinook.....	.....	.....	18.7	44.3	55.9	64.6	69.8	67.8	55.5	.....	.....	.....	.....
Clemous .....	22.6	22.2	25.9	40.5	49.3	57.2	64.0	63.4	53.7	44.3	29.8	27.6	41.7
Columbia Falls .....	23.4	24.5	30.9	44.1	52.7	58.2	64.6	64.5	52.7	.....	.....	26.1	.....
Crow Agency .....	20.8	17.3	29.7	47.1	56.4	64.4	71.2	70.9	59.6	48.3	32.1	27.8	45.5
Deer Lodge .....	21.3	24.3	29.4	40.6	49.4	59.0	61.7	60.3	52.1	39.6	31.0	21.6	41.1
Fort Benton .....	18.4	24.1	29.7	45.6	56.7	64.1	70.4	67.9	58.5	47.4	30.1	21.7	44.6
Fort Logan .....	17.7	16.8	26.0	39.2	47.8	55.9	62.6	61.0	51.5	41.6	28.7	20.9	39.1
Glasgow.....	8.5	8.9	19.6	45.1	57.3	64.3	71.2	68.2	56.0	42.9	21.3	17.3	40.0
Glendive .....	13.9	13.2	24.4	47.6	58.5	66.4	73.0	72.0	60.4	47.5	28.0	21.8	43.9
Great Falls.....	25.4	26.3	32.1	46.5	54.4	62.3	68.6	66.6	56.9	37.2	32.1	30.8	44.9
Havre .....	12.0	13.1	25.9	43.3	53.0	61.3	67.6	65.7	55.5	43.2	28.6	22.2	41.0
Helena .....	18.7	21.9	32.1	43.9	52.2	59.8	66.9	66.4	56.3	45.2	31.6	26.1	43.4
Kalispell.....	.....	.....	.....	.....	.....	60.0	65.2	63.0	53.8	.....	.....	26.9	.....
Kipp .....	18.9	18.8	23.2	39.9	48.6	55.6	61.1	51.9	49.1	39.1	25.5	25.0	38.6
Lewistown .....	.....	24.6	25.7	42.0	.....	.....	.....	.....	.....	.....	.....	.....	.....
Livingston .....	25.1	28.3	29.4	42.9	.....	.....	.....	.....	.....	47.4	31.1	30.3	.....
Manhattan .....	20.3	23.5	37.8	.....	52.6	59.8	65.0	62.4	52.2	41.0	28.0	21.5	.....
Martinsdale .....	23.0	21.4	28.2	42.0	51.2	58.5	65.9	64.5	53.7	43.3	31.2	27.0	42.5
Marysville .....	21.4	22.3	24.7	41.2	48.6	56.2	63.2	62.4	51.5	41.8	29.1	25.6	40.7
Miles City .....	16.2	16.0	28.5	46.2	56.6	66.0	72.9	71.7	60.3	47.1	28.8	23.7	44.5
Missoula .....	19.8	24.5	33.4	44.6	54.0	59.9	66.8	65.3	55.4	44.8	32.1	24.6	43.8
Poplar .....	4.5	5.9	21.0	43.2	54.4	64.1	69.6	67.0	56.9	43.5	24.8	13.1	39.0
St. Paul's .....	.....	19.6	22.2	.....	.....	60.5	.....	.....	55.8	44.7	.....	.....	.....
Troy .....	26.5	29.9	34.2	47.5	54.3	60.8	64.8	62.7	55.2	45.2	35.4	28.5	45.4
Utica .....	23.0	23.0	25.7	42.7	51.0	59.1	65.3	65.4	54.7	43.8	30.4	28.7	42.7
Wibaux.....	16.6	19.2	26.2	47.1	56.1	64.3	69.4	67.2	56.3	45.8	27.2	23.8	43.3
Yale .....	23.0	25.5	26.5	41.2	49.7	58.9	64.7	61.1	54.1	41.6	31.2	28.1	42.4

NORMAL PRECIPITATION TO JANUARY 1, 1901.

Stations	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug	Sept.	Oct.	Nov.	Dec.	Annual Mean
Billings...	0.86	0.20	.....	0.94	2.58	3.03	0.79	1.12	.....	.....	.....	0.23	.....
Boulder .....	0.88	0.30	0.36	1.43	1.47	2.06	0.84	0.57	1.15	0.62	0.27	0.30	10.25
Butte .....	0.94	0.70	0.93	1.17	1.72	1.57	1.16	0.53	1.31	0.80	0.66	0.62	12.11
Chinook.....	.....	.....	0.70	0.87	2.57	2.06	0.52	1.08	0.96	.....	.....	.....	.....
Clemous .....	1.39	1.08	1.45	1.84	2.57	2.63	1.10	1.16	1.19	1.13	1.14	0.74	17.45
Columbia Falls .....	1.82	1.35	1.29	1.27	2.15	2.51	1.72	1.47	2.99	.....	.....	.....	.....
Crow Agency .....	0.80	0.46	0.68	1.45	2.20	2.82	1.31	0.96	0.81	1.22	0.73	0.57	14.01
Deer Lodge .....	0.73	0.61	0.86	1.03	1.84	2.71	0.98	1.19	0.89	0.90	0.75	0.59	13.08
Fort Benton .....	0.63	0.44	0.58	1.13	2.55	2.42	1.15	0.84	0.94	0.69	0.55	0.62	13.09
Fort Logan .....	0.60	0.35	0.80	0.98	1.19	1.97	0.97	0.58	0.99	0.93	0.97	0.50	10.53
Glasgow.....	0.45	0.73	1.53	1.34	1.90	1.91	0.59	0.33	0.69	1.33	0.70	0.52	12.02
Glendive .....	0.74	0.59	1.30	1.42	2.47	3.54	1.66	0.70	1.15	1.14	0.76	0.53	16.00
Great Falls.....	0.68	0.47	0.76	1.20	2.23	2.81	1.46	0.61	1.03	0.65	0.98	0.47	13.35
Havre .....	0.82	0.54	0.57	0.94	1.78	2.93	2.00	1.32	1.17	0.71	0.74	0.55	14.10
Helena .....	1.18	0.75	0.82	1.15	1.83	2.28	1.11	0.67	1.12	0.91	0.84	0.80	13.46
Kalispell.....	.....	.....	.....	.....	.....	1.59	1.13	1.42	.....	.....	.....	0.75	.....
Kipp .....	0.81	0.90	1.63	1.42	3.00	1.10	1.35	1.52	2.16	1.56	1.82	0.90	20.17
Lewistown .....	.....	1.01	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Livingston .....	0.60	0.69	0.88	0.68	.....	.....	.....	.....	.....	1.16	1.23	0.46	.....
Manhattan .....	0.25	0.45	0.34	0.79	1.35	1.53	0.43	0.39	1.04	0.88	0.50	0.32	8.27
Martinsdale .....	1.34	0.85	1.00	1.44	2.18	2.62	1.30	0.67	1.28	0.95	1.20	0.71	16.05
Marysville .....	1.32	1.22	1.32	1.15	2.29	2.16	1.18	1.01	1.48	0.91	1.53	1.02	16.59
Miles City .....	0.51	0.42	1.44	1.28	2.17	2.14	0.96	0.91	0.79	1.02	0.71	0.33	12.68
Missoula .....	1.62	0.95	1.03	0.97	1.93	2.10	1.07	0.75	1.20	1.32	1.44	1.50	15.91
Poplar .....	0.64	0.58	0.90	1.05	1.70	2.51	1.72	0.84	0.78	0.80	0.91	0.42	12.85
St. Paul's .....	.....	1.01	1.06	.....	.....	1.70	0.93	0.71	0.55	0.92	0.69	.....	.....
Troy .....	2.34	1.52	1.70	1.33	2.03	2.07	0.88	0.93	2.09	1.68	4.67	2.45	23.71
Utica .....	0.68	0.33	0.82	1.33	2.39	3.14	1.8	1.04	0.84	0.99	1.31	0.47	15.24
Wibaux.....	0.74	0.26	0.72	1.12	2.38	4.09	2.25	1.18	0.54	0.50	0.68	0.25	14.71
Yale .....	0.47	0.35	1.28	1.42	1.60	1.42	1.66	0.54	0.66	1.03	1.00	0.38	11.81



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